# SAFETY Education

NOVEMBER 1957

*Two Sections • Section One*

A MAGAZINE FOR TEACHERS AND ADMINISTRATORS

NRA INSTRUCTOR SHOWS TEENS WHY GUNS MUST BE KEPT CLEAN

See "Classroom" at Camp Perry, pages 8 and 9

## EDITOR'S NOTEBOOK . . .

Have you ever heard of a device that would "freeze" children in a certain position for a period of time so that they couldn't get out of hand or, without thinking, rush into some careless act, only to get hurt or injure someone else? If it exists, you say, it sounds like the fulfillment of a harried teacher's dream at about 3:00 of a week-day afternoon! (Of course, we wouldn't want to deprive children of their freedom to run and jump permanently, but if we could just stop them for a little while . . .)

Well, such a device exists, and you can read about it on pages six and seven. It's the *"Freeze" Bell*, which has proved not only fun for the children and a big help to their teachers, but a real instrument in the prevention of playground accidents in Anaheim, California. Briefly, it works like this: about a half-minute before the signal rings to end recess, a bell clangs. Hearing this bell, children on the playground "freeze" in whatever positions they are in at the moment. At a second signal, they leave the equipment they are using slowly and safely, form lines without pushing or shoving, calmed down by this short period of inactivity, and quietly pass into the building, psychologically ready for a return to class work.

You are urged to read about the "freeze" bell; you may wish to consider using it in your school or school system.

You'll enjoy reading, also, about a live-wire Omaha Red Cross director who worked with the schools in that city, with the teens and with city officials to establish a "Safe-Teens" program, a program which has brought safe driving to the attention of teen-agers—and adults, too—all over the city. *Safe-Teens* has been planned to continue for many years as an on-going project in traffic safety education directed toward the teen-age driver. Mrs. McClung, the director in question, is winner of a Carol Lane award this year for her work with the teen-agers in Omaha, and you can read about her work on pages two and three.

We think you'll also be interested in the other articles we've selected for this November issue—on dramatizing safety, establishing a safety program in institutions of higher education, using simulated autos in driver education—as well as other subjects. And we hope you'll write us with suggestions for articles you would be interested in reading in SAFETY EDUCATION, or tell us of unique safety programs you're carrying on in your schools, about which you think other safety educators would be interested in hearing.

From this editor's desk, then, to yours, goes this issue of SAFETY EDUCATION. A strong, continuing school safety education program, backed by honest public support and concern, is our only solution to the terrifying accident toll among our children.

BEVERLY THOMPSON


**NATIONAL SAFETY COUNCIL**
**CHARTERED BY THE CONGRESS OF THE UNITED STATES**

W. S. S. RODGERS, Chairman of the Trustees. (Former Chairman, The Texas Company, New York.)

WALTER A. STEWART, Chairman, Board of Directors. (Trustee and Former President, American Optical Company, Southbridge, Mass.)

NED H. DEARBORN, President.

GEORGE C. STEWART, Executive Vice President.

LOWELL B. FISHER, Vice President for Schools and Colleges.

R. L. FORNEY, Secretary.

WAYNE P. HUGHES, Director, School and College Division.

NORVAL BURCH, Editorial Director, Council Publications.

---

**SCHOOL AND COLLEGE SECTIONS AND COMMITTEES**

**Safety Education Supervisors Section**

Chairman: CECIL ZAUN, Supervisor of Safety, Los Angeles City Schools, Los Angeles, Calif.

**Driver Education Section**

Chairman: EDWARD ABRAMOSKI, Safety Coordinator, Erie School System, Erie, Pennsylvania.

**Standard Student Accident Report Committee**

Chairman: THELMA REED, Principal, Frances Willard School, Kansas City, Mo.

**School Transportation Committee**

Chairman: W. T. EDGREN, Supervisor, State Department of Public Instruction, Des Moines, Ia.

**School Plant Planning Committee**

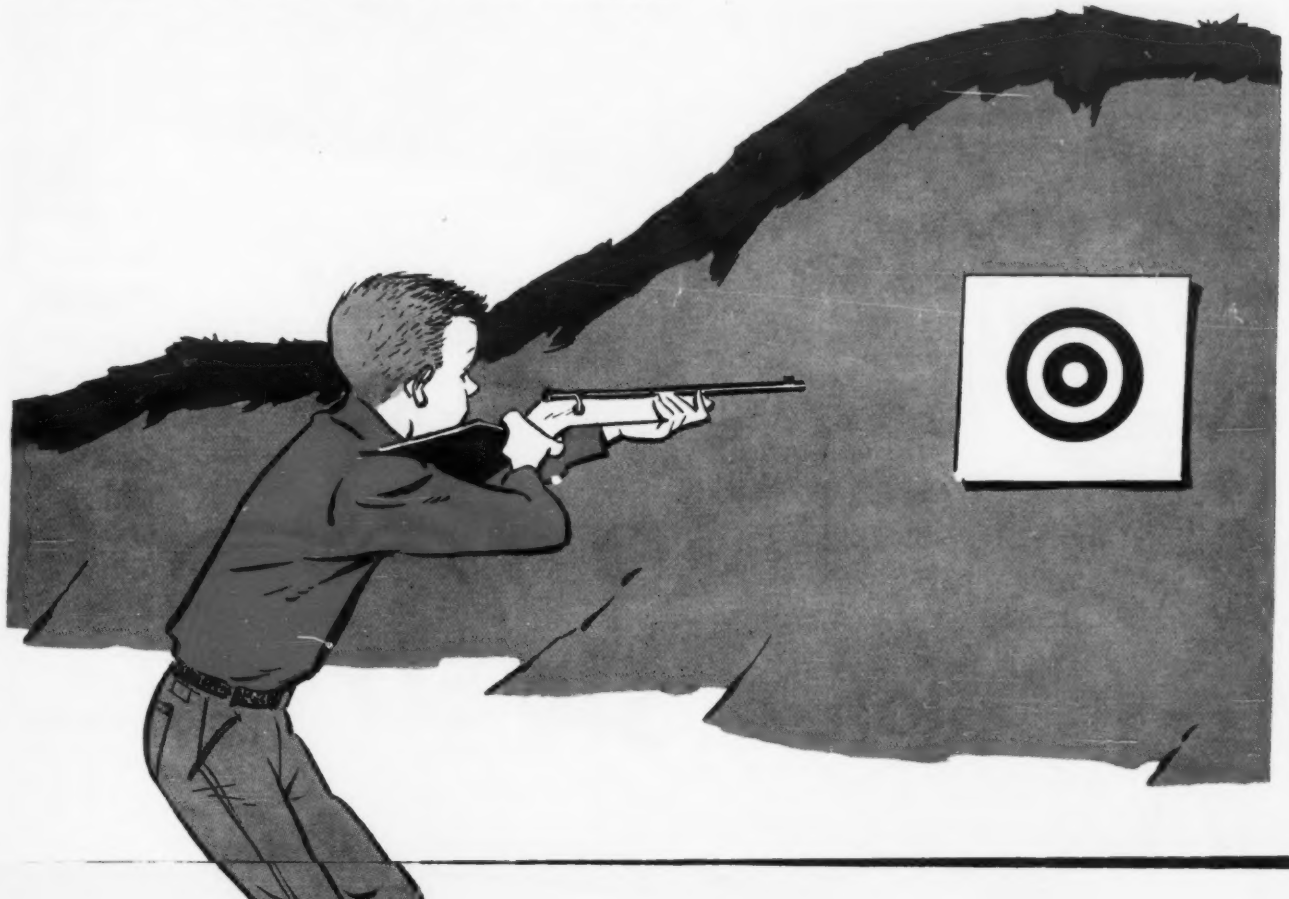
Chairman: THOMAS J. HIGGINS, Director, Division of School Building Survey, Chicago Public Schools, Chicago, Ill.

**Judges Committee National School Safety Honor Roll**

Chairman: FORREST E. LONG, Professor of Education, School of Education, New York University, N. Y., N. Y.

**Advisory Committee Safety Education Magazine**

Chairman: MAY HAZARD, Safety Sponsor, Copernicus Jr. High School, Hamtramck, Mich.; John Hill, Director, Workmen's Compensation Insurance, Texas A & M College System, College Station, Texas; Avis P. Moore, Social Studies Dept., National College of Education, Evanston, Ill.; Forst E. Lowery, Mgr., Greater Minneapolis Safety Council, Minneapolis, Minn.; Lewis Clark, Safety Director, Lansing, Mich., public schools; Stanley McKee, Prin., Lincoln School, Highland Park, Ill.; Mrs. Jack C. Greig, member-at-large and past president, Indiana Congress of P.T.A.



# SHOOT

## only in

## Safe places

© NATIONAL SAFETY COUNCIL CHICAGO • PRINTED IN U. S. A.

S-1120-A

Your
COMMUNITY'S
PLAN
for
TRAFFIC
SAFETY
SCHOOLS
CITIZENS
COURTS
RECORDS
SAFETY
ORGANIZATIONS

© NATIONAL SAFETY COUNCIL CHICAGO • PRINTED IN U. S. A.

S-1121-A

**SCHOOL AND COLLEGE CONFERENCE—1956-57**

Zenas R. Clark, Chairman

E. R. Abramoski • Dale Auck
Dewey Barich • W. W. Bauer
Frank Bennett • Mrs. P. D. Bevil
Fred L. Biester • Norman E. Borgerson
Iris Boulton • Earl H. Breon
• Robert W. Broughton •
C. L. Brownell • Percy Bugbee
Lowell Burkett • J. R. Christian
Price E. Clark • Walter A. Cutter
M. R. Darlington, Jr. • C. DeMent
J. Duke Elkow • Evan Evans
Lowell B. Fisher • C. W. Foster
Don Gavit • Mrs. Lillian Gilliland
Lonnie Gilliland • Norman Gore
P. E. Harrison, Jr. • W. G. Hazard
Fred V. Hein • Donald M. Higgins
Thomas J. Higgins • John W. Hill
F. G. Hochwalt • Mildred Horton
Wayne P. Hughes • Harold K. Jack
Stephen James • George Jennings
K. Richard Johnson • Mrs. H. Knandel
Mrs. Fred Knight • Dalibor Kralovec
Harold Lillie • Forrest E. Long
• James Mann •
Stanley Mate • Paul Miller
Sarah Miner • M. D. Mobley
Amos E. Neyhart • James O'Neill
Alfred L. Papillon • F. J. Parker
Donald Peters • Ralph Peters
H. V. Porter • A. H. Pritzlaff
Miss Thelma Reed • E. A. Richards
Perry Sandell • Elsa Schneider
W. A. Shannon • Leslie Silvernale
Gordon D. Smith • Genevieve Squires
Herbert J. Stack • Ivan J. Stehman
Ralph Stinson • Randall Swanson
Warren Taylor • J. E. TePoorten
Mrs. D. J. Thompson • N. E. Viles
Mary Weeks • F. W. Westervelt, Jr.
Virginia Wheeler • Cecil Zaun
Robert B. Zimmerman

EDUCATIONAL PRESS ASSOCIATION OF AMERICA

Contents of SAFETY EDUCATION are regularly listed in "Education Index."

# SAFETY Education

A MAGAZINE FOR TEACHERS AND ADMINISTRATORS

Volume XXXVII No. 3 Section One

Beverly Thompson, *Editor*
H. W. Champlin, *Advertising Manager*
R. O. Jones, *Asst. Advertising Manager*
O. E. Mickila, *Advertising Production Mgr.*

## CONTENTS for NOVEMBER, 1957

**Of Interest to All**

They're "Safe-Teens" Now in Omaha
—*Beverly Thompson* ..... 2
"Classroom" at Camp Perry
—*Edgar C. Cook, Jr.* ..... 8
Does Your Community *Back-the-Attack?*
—*Unit No. Seven, School Traffic Safety Education* ..... 25
Views and Reviews ..... 28
New Products ..... 37
Bulletins ..... 38
Trade Publications ..... 40

**Of Specific Interest**

***Elementary***

The "Freeze" Bell
—*Eldon Hauck* ..... 6
"Let's Have A Safety Play!"
—*Shirley Strong* ..... 10
Elementary Safety Lessons
—*Ruth Jewell* ..... 29

***Secondary***

Easy on the Gas . . . Ahead on Safety!
—*N. J. Hubner* ..... 4
Are Simulated Autos "Doing the Job" in Training Our Future Drivers?
—*forum-in-print* ..... 14
Safety in the Sheet Metal Shop
*safety education data sheet number 83* ..... 17
Secondary Safety Lessons
—*Dr. Vincent McGuire* ..... 33

***College***

Developing a Safety Program for Your College or University *(Part Two)*
—*Daniel Webster* ..... 12

*Cover Photo courtesy of National Rifle Association*

Chartered by the Congress of the United States

**SAFETY EDUCATION is published monthly, September through May, in two sections, by the National Safety Council, 425 N. Michigan Avenue, Chicago 11, Illinois. Entered as second class matter, September 13, 1939, at the Post Office in Chicago, Illinois, under the act of March 3, 1879. Copyright, 1957, by the National Safety Council. Printed in the U.S.A. Subscription price $3.50 a year. Ten per cent discount to schools. Reduced prices for quantity orders.**

*By Beverly Thompson*

# They're S

*Above: "Safe-Teens" at one high school proudly display their membership flag in school hall.*

*Below: Mrs. Robert McClung, left, and Mrs. Carol Hegarty check names of registered "Safe-Teens" against moving violation lists supplied by the police department.*

*For more information about this vital program, write Mrs. Robert McClung, Director, Junior Red Cross, 432 So. 39th St., Omaha, Nebraska.*

A TRAVELER, driving along the streets of Omaha any one of these late fall days, notices many pleasant sights in that brisk Midwestern city.

One of the most pleasurable sights is that of the great number of courteous, responsible teen-age drivers—with bright red and black bumper strips on their cars emblazoning a message for all to see: "Safe-Teen."

The fact that more than 3,000 high school boys and girls in Omaha are "Safe-Teens," and additional teen-agers are signing up every day in high schools of the city is a tribute to the initiative and organizing ability of one woman —Mrs. Robert S. McClung. It was Mrs. McClung, director of the Junior Red Cross for Douglas County, who saw the opportunity to get teen-age social pressures working towards traffic safety, and *used* that opportunity to build a teen-age traffic safety program which not only recognizes safe young drivers but makes good driving a badge of honor among the teen-agers themselves.

For her organization of the "Safe-Teen" program in Omaha, an organization so complete that it provides methods and means for continuing the program for many years, Mrs. McClung received the third place individual achievement award in the Carol Lane Awards Program this year. The Carol Lane Awards, sponsored by the Shell Oil Company and administered by the National Safety Council, are awarded to women and groups who have made

**Social pressures among teen-agers can be used effectively to help solve the teen-age traffic problem. In Omaha, they drastically reduced teen-age violations when teen-agers pledged to drive safely in a program with *teeth* in it. . . .**

# *Safe-Teens* Now in Omaha!

outstanding contributions in traffic safety in their communities.

Mrs. McClung had long been active in the work of the Omaha Safety Council when the "Safe-Teens" idea was first presented to her. Up to that time, however, there had been no organized effort to enlist the support of young drivers in solving the traffic problems of their age group. There had been no effort to make them feel individual responsibility for traffic safety; and no use was made of the "social pressures" of this age group to develop positive driving attitudes.

There had been a moderately successful city-wide high school safety council, but this organization had no sustaining groups within schools to bring the safety message to students. When Mrs. McClung heard of the "Safe-Teens" program originated by Judge Frances Cook of Beaverton, Oregon, in which teen-age drivers sign up in "Safe-Teens," receive an identifying bumper strip and membership card which must be returned if the driver is convicted of a hazardous moving violation, she wrote to Judge Cook for particulars. Receiving them, she promptly set to work.

School officials gave whole-hearted support in agreeing to allow another student group into already over-crowded activities. Each of Omaha's 11 high school principals named 10 outstanding student leaders who could be expected to back the program in his school.

The program was explained to the students at a dinner sponsored by a local department store. December 1 would be the day upon which students would sign up as "Safe-Teens" in school, receive their bumper strips and membership cards. All that was required for membership: a valid driver's license and a car safety-checked by any policeman.

Schools would be notified of traffic violations by the police department. A judiciary committee from the school "Safe-Teen" council would summon the violator if he was a member of "Safe-Teens," decide if the violation was hazardous enough to revoke his bumper strip and membership card. After 30 days, upon request, the student would be eligible for re-instatement as a "Safe-Teen." Parents would be notified of violations and asked to urge the young driver to request re-instatement.

City police worked closely with Mrs. McClung in planning administration of the program and liaison between the schools and the police department.

Assemblies were held in the schools at which the student leaders brought "Safe-Teens" to the attention of their fellow students. School "Safe-Teen" councils were set up. School newspapers and local papers headlined the effort. Mayor John Rosenblatt proclaimed December 1 "Safe-Teen" Day.

On December 1, 2,947 Omaha teen-agers signed up to become "Safe-Teens." A difference in teen-age driving habits was noted almost immediately. At the end of that school year, there were 192 moving violations recorded among this group. Compare this to the 1,617 violations recorded in the same period of time by an estimated 8-9,000 *non* Safe-Teens!

Through careful organizational groundwork and the cooperation of PTA and other strong local groups, the program is assured of continuing through many years. For the teen-age traffic problem cannot be lessened by one or two years of strenuous campaign. Those who will be new drivers in future years must have the opportunity to become "Safe-Teens" also.

In Omaha, this opportunity has been assured!●

# Easy on The

THE majority of high school students are careful and capable drivers, interested in safety and economy in driving an automobile. The minority, who bring adverse publicity to the teen-age driver, *can* be safe drivers if they would change their attitudes.

That's what our LaPorte High School Safety Economy Run proved when it was held last year. The Economy Run was unquestionably the finest safety project of the 1956-57 school year.

It didn't look as if it would be very successful, however, just after we announced it. A monumental silence greeted planners for the first few days after plans for the Run had been made public. Student entries were slow in coming in. The first hint of enthusiasm came to us second-hand—when a garage owner reported that many students were coming in to have their cars safety-checked and tuned up! After a panel of high school students discussed the Run over a local radio program, the entries came in thick and fast. Because the project was limited to only 25 contestants, many, many entries had to be refused.

The Run, sponsored by the Socony Mobil Oil Company, presented our teen-agers with an excellent opportunity to show their driving mettle—*and* to learn that safe driving is economical driving. On the big day, hundreds of townspeople as well as students gathered to watch the proceedings.

The 25 students who competed in our Safety Economy Run were being tested in two areas: safest driving habits, and highest gas mileage for the 100-mile course. Adults rode with the students as observers, checking and penalizing for safety rules, helping the contestants with the course.

(When these people were first asked to be checkers, many were skeptical. Housewives and

*By N. J. Hubner*
*Director of Safety, Physical Education and Athletics*
*La Porte City Schools*
*La Porte, Indiana*

*Left: Winston Chesney, left, congratulates fellow Economy Run winner Alan Anderson after the two won honors in La Porte's 100-mile economy run.*

# Gas . . . Ahead on Safety!

businessmen, they dreaded a 100-mile drive with a teen-ager. But a radio interview with a high school faculty member stirred their participation, interest and cooperation. After the Run, they all spoke highly of the ability, attitude and sincerity of the contestants. And they volunteered for next year's Run! These observers said the Economy Run assured them that students are serious, efficient and capable, and that they know the rules of safe driving.)

And they're right. Most students *are* good drivers. They demonstrated this to the community and to their fellow students during the Run. They learned something, too. Here's what two winners said about economy driving:

*Alan Anderson, first place winner:* "When you drive with economy, you also drive with safety. This is the joy of economical motoring. On my 100-mile journey . . . I kept my speed between 45 and 55 miles per hour, trying to keep it as constant as possible. I think the foremost factor in my economy was that I watched the road as far ahead of myself as I could. When I saw a car ahead of me apply his brakes, I took my foot off the gas. I also tried to avoid stopping and starting as much as possible, because of the extra gas consumed in the process of shifting gears.

"Another thing to avoid is fast get-aways at stop signs and stoplights. Usually, you gain absolutely nothing from a fast start, but you do lose gas and probably several miles' wear on your tires.

"Above all, you should use that gift of everyone's—Common Sense—to keep you ahead in economy and safety."

The third place winner and the contestant who recorded the most miles per gallon of gas was Winston Chesney. Said Winston:

"The sponsor of the LaPorte High School Safety Economy Run gave out helpful folders with some very good tips on economical driving. Along with teaching us how to drive for economy, we also were taught how to drive safely and courteously. My observer was also a great help to me.

"I think the Run made the students more conscious of safe driving, and they discovered that driving this way is most economical. All of the fellows around school were tuning up their cars to get them in the best condition for winning the Run. . . ."

**Take 25 teen-age drivers, 25 cars and 25 adults to go along as observers . . . mix in 100 miles of driving through cities, towns and countryside. That's what La Porte, Indiana, did in a 100-mile safety economy run. Here are the results:**

*Above: After 100 miles, a winner crosses finish line.*

*Above: Indiana trooper checks contestant's car beforehand.*

The success of the Run was due not only to the cooperation of the Socony Mobil Oil Company, but the state, city and county police officials, the faculty of the high schools and, most of all, the students themselves.●

THIS was activity! Children everywhere were taking part in circle, running, and chasing games. The swings, slides, overhead ladders, and climbing mazes were swarming with primary children.

Suddenly a bell rang! Just as suddenly all activity stopped. It was as if in viewing a motion picture it was suddenly stopped by the projectionist. I was amazed!

Children stood like statues. The only movement was the gradual slowing of the occupied swings. They slowed to a standstill. The children remained sitting in the seats.

Children formerly occupied with the dashing activity of a circle game were standing exactly as the bell had caught them. Some were posed as if taking a step in running. One stood on one foot, arms flung wide, like a ballet dancer. A jump rope hung limply from the hands of the two children who, seconds before, had been whirling it exuberantly in their group. The child who had been jumping was in a crouched position, elbows out, arms forward.

"Is this a new game?" I asked myself.

At almost the same time, one of the teachers who was on supervision duty blew her whistle. Immobility ceased. The children started *walking* from their play areas. They talked to one another quietly as they formed their lines. They waited here until each group was complete and then moved off toward their classrooms.

I hurried toward the principal's office.

"What is this I've just observed on your playground?" My question was directed to Charles DePue, principal of the school.

He told me he called it the "freeze" bell, that they were trying it in order to quiet the children before their return to the classrooms, that it helped the orderly dispersal from the play areas.

Only two weeks before I had been on a school playground when a bell ended the recess period.

## Make calming down after recess more fu

A third-grade boy left the seat of his swing when he heard the bell. This would have been all right if the swing had been motionless. But that boy left the seat at a height of nearly ten feet above the ground! His body arched outward and upward before it descended.

I held my breath through his descent and ran to him as soon as he struck the ground. He hit feet first, but they slid from under him, and the ground came up to meet his bottom. He bounced a couple of times and came to rest. His eyes, opened wide, matched the startled look on his face. He shook his head back and forth vigorously, got to his feet and raced toward the building, unaware of my presence until I intercepted him.

After satisfying myself he was still in one piece, I reminded him that he could get hurt by doing things like that. He saw the light and continued his race toward the building.

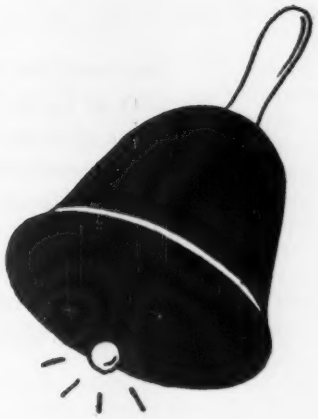
When I saw the "freeze" bell system for the first time, I could see the merit such a program would have toward curtailing the playground accident rate. This system—a period from complete cessation of activity among children in a high state of excitement to the resumption of normalcy—was something to think about.

Other schools within our district have now adopted the "freeze" bell and report success.

Simply, the "freeze" bell is a signal that is given just before the signal which ends a period of playground activity. In the John Marshall School, this bell sounds two minutes before the ringing of the regular bell which ends the recess period.

*Left: Outdoor activities such as these during recess make children excited and gay, hard to calm down when the time comes to return to class. The "freeze" bell makes slowing down fun, prepares them for going back to school in quiet, orderly lines.*

*nd safer* for the children. Try . . .



# The "Freeze" Bell!

*By Eldon Hauck*
*Consultant, Physical Education*
*Chairman, Safety*
*Anaheim City Elementary Schools*
*Anaheim, California*

When the bell has rung, all activity on the playground stops or subsides toward the stopping point. Children on the swings let the swing come to a stop and remain in the seat. Those making their way across the overhead ladder continue to the end, climb off and stand. A child coming down the slide continues his descent and stands at the foot of the slide. Those going up the ladder back down and remain standing at the foot of the ladder.

In a few seconds all activity has stopped. It resumes when the supervising teacher blows a whistle. On this signal, the equipment is collected by the monitors and/or returned to the portable equipment box; the children *walk* to the prearranged assembly point and form their lines preparing to re-enter their classrooms.

What the children do as they walk from their different activities to form their lines is dependent upon the wishes of the administrator and teachers who design the program. They may be allowed to talk quietly or not at all. However, experience at the Marshall School recommends some vocal activity as partial relief from the high-tensioned emotional and physical states built up during recess.

The success of such a program depends upon how it is introduced to the teachers and students. The total acceptance would be in its many advantages from the standpoint of safety and the orderly continuation of classroom activities which require quiet and concentration.

List the advantages to the teacher, give examples of how the accident rate can be lowered. Show the difference between the child's return to the classroom in a highly excited state without the aid of the slowing-down process, as compared to the advantages of better group control ensuing from it. The "freeze" bell does the work of the teacher who is normally occupied going up and down the lines of her charges quieting them before they go inside.

In inaugurating the "freeze bell," education of the children must be a continuous process. Teacher attention at first must be heavily concentrated on children who disobey the bell by continuing their activity. Most children will respond wholeheartedly to this new responsibility, but there will be some who need additional encouragement. There can be no exceptions or the program will not be totally successful.

The teachers, once they are receptive to the plan, educate their charges and orient newcomers to their classrooms. The principal supervises to assist in problems encountered and to encourage full participation. Children who do not conform should be reprimanded on the spot by the teachers. The signal for dispersal to lines or classrooms should not be delayed, but should come within seconds after the "freeze" bell and when all activity has stopped. The effectiveness is lost if children are held too long.

The children? They'll love it. The majority of them will accept the challenge and follow through. They'll treat it as a game and follow the rules. They'll compete with one another in attempting to establish a new stopping position in an activity that can be very much like the game of statues.

End results? Fewer playground accidents and orderly dispersal from playground with quieter entrance into the classroom, ready to return to quiet activities.

Not only do the National Rifle Matches at Camp Perry, Ohio, draw champion shooters from all over the nation to match their skills . . . here also the National Rifle Association conducts one of its largest schools, training *new* shooters, most of them teen-agers, the secrets and skills of rifle shooting, that *good* shooting is *safe* shooting . . .

*Above: Boy on right spots and calls shots for friend shootin*

# "Classroom'

*By Edgar C. Cook, Jr.*
*Farm Division*
*National Safety Council*

*CAMP PERRY, OHIO*—These are almost magic words to thousands of American men, women and teen-agers who find a certain joy in the highly competitive sport of shooting, especially rifle shooting. Here, located on the shore of Lake Erie, is the mecca of the nation's most highly skilled marksmen. It is here that the National Rifle Matches are held each year in August and September. And it is here that the champions are selected after days of rigorous shooting.

Safety-wise, the National Rifle Matches have an astounding record. Established by Act of Congress in 1903, the matches have never been marred by a fatality caused by accidental discharge of a weapon.

This record is no accident. It is the result of a combination of factors including education and supervision. But the emphasis is on education, even though no stone is left unturned to make these matches as safe as possible through mechanical and supervisory means.

In few sports events is the death and injury potential so high, yet how many games can claim a better record for safety?

Safety is a prime concern to those responsible for conducting the matches. Almost everywhere safety posters appear, pointing up the fundamentals of safe conduct and the consequences of ignoring safety rules. Helpful though these warnings may be, they constitute but a small part of the safety emphasis.

That the National Matches have compiled an enviable safety score is due, of course, in part to the fact that they are attended in large part by men and women with years of shooting experience. This experience, combined with constant supervision on the firing line, has made Camp Perry free from fatalities.

The great growth in attendance by teen-agers has presented some problems and many opportunities for the National Rifle Association to teach firearm safety and skillful gun handling.

Says Stanley A. Mate, who heads up the National Rifle Association's training programs, and is a member of NSC's School and College Conference: "These matches present us with the opportunity to train a large number of young people (adults, too) in the skills of safe rifle shooting, but similar programs are being carried out under the supervision of public schools and other agencies as a regular and continuing activity.

"Just take a look at New Hampshire," points out the National Rifle Association official. "New Hampshire hasn't had a reported hunter fatality in three years. We think this is largely due to the fact that *83 per cent of the schools in that state teach firearm safety.*

"This is important. It shows that firearm accidents can be reduced through effective edu-

cational efforts. It is important because the number of persons using guns for recreation has been increasing and very likely will continue to do so. In recent years about 14 million hunting licenses have been issued annually," he emphasized.

Mr. Mate then quickly outlined what is being done to reduce firearm accidents. Most of it affects teen-agers, and much of it is being done in schools.

"Our Junior and Tyro School here at Camp Perry is but one small effort in the over-all educational program. It is designed chiefly to teach the fundamentals of rifle shooting to teen-agers. We hold two schools here, each of four days' duration," Mate stated.

The Junior and Tyro School course begins

# at Camp Perry

*Left: As instructor explains, Marine on the ground demonstrates a point in the lesson. Demonstration is an important part of the training given at Camp Perry.*

with a long session devoted entirely to the subject. From then on, safety is incorporated into almost every phase of instruction.

"Adequate adult supervision pays safety dividends in these courses," Mr. Mate explains. There is one instructor for every two or three students. There are extremely few instances of unsafe practices on the part of the students, and these are quickly nipped in the bud. "We really drum safety into these kids," he declared.

Nationally, the N.R.A.'s Hunter Safety Courses, initiated in 1950, are the foundation for the educational work being done to reduce firearm accidents. To date, approximately 250,000 persons have completed the course.

Another major bulwark in the effort to reduce firearm accidents are the programs of 4,281 junior rifle clubs throughout the country. More of these clubs, says Mr. Mate, are sponsored by public and parochial schools than by any other type of organization.

There is a growing conviction that schools should teach outdoor skills which have lifelong value, according to Mr. Mate. This conviction has flowered into a number of outdoor education workshops designed to acquaint teachers with such sports and activities as shooting, fishing and a number of others. Hunting and shooting occupy a major spot in these programs which are conducted by the American Association for Health, Physical Education and Recreation, a section of the National Education Association.

The importance attached to education for firearm safety is demonstrated in 10 states where legislation has been enacted requiring teen-agers, on application for a hunting license, to present a certificate showing the applicant has successfully completed a gun safety course. These states include New York, Montana, Washington, New Jersey, Connecticut, Massachusetts, California, South Dakota, Minnesota and Rhode Island.

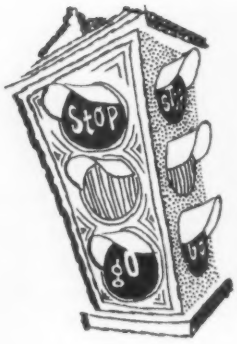
Three states, Vermont, New Hampshire and Arizona, have legislation permitting the subject to be taught in schools, while Wisconsin has a legislative resolution encouraging the teaching of firearm safety. Voluntary programs have been authorized in Idaho, Ohio, Missouri, Oklahoma and Illinois.

In the total accident picture, firearm fatalities and deaths rank low. They should be reduced to the very lowest level possible. Education seems to be the answer, and schools can play a very important part in this process●

*By Shirley E. Strong*
*Senior Student*
*Western College*
*Oxford, Ohio*

# "Let's Have A Safety Play!"

## . . . We'll Make a Visit to Safety Town!




**Your second graders may wish to dramatize their safety lessons by acting out this play, or elaborating on it to devise one of their own. Either way, it should be fun *and* educational, says the author, who is studying to be a teacher and wrote the play as a part of a safety unit in one of her Western College classes.**

THE ideal play for the children of the second grade is written by themselves. Ideas for their play should come from their study. The following play is merely a suggestion for elaboration by the pupils, for memory fun and for rhythm development.

*Purpose:*

To help the children express what they have learned about safety.
To develop the pupil's ability of expression.
To develop rhythm in the pupil's speaking.
To provide an opportunity for group activity.

*Characters:*

Four passengers in a car
One driver
One railroad man at a crossing
One policeman at a crossing
Four children in a play area
Two traffic lights
Four safety signs
  a. Stop
  b. Slow
  c. Caution—play area
  d. Railroad ahead

*Scene:* (Bare stage)

Imaginary highway
Traffic—one cardboard car

*Announcer:*

One day I went walking not very far
When I saw on the highway a very old car.

It sped right along the people were gay
When it passed me I heard someone say—
*(Enter—four children on stage behind cardboard auto)*

*First child:*

You may visit anywhere. Where would you like to go?

*Second child:*

Of any town, I'd like to choose the safest one we know.

*Third child:*

Then it's off to Safety Town we scurry,

*Fourth child:*

I'm driving and refuse to hurry.
*(Car does not move—scenery comes on stage behind car)*
*(Railroad man comes on stage, railroad sign appears stage left)*

*Railroad sign:*

Slow down, mister, look and see.
A train is coming, now watch me.

*Railroad man:*

You must be new, then hear my ditty,
We are proud of our Safe City.

*First child:*

Thank you, sir, we must go now.
*(to others in car)* He is polite, see him bow!

*Second child:*

Look, ahead, children at play.
I see a sign. What does it say?

*Slow sign:*

I'm here to tell you, "Children at play."
Drive safely, drive slowly! Please obey.

*Third child:*

Yes, Mr. Sign, I mean, Mr. Slow,
You watch and see how slowly we go.
*(On stage—children in play area.)*

*Fourth child:*

Look, ahead, children singing!
*Children in play area—*
We are so happy, see us swinging.

*Girls: (in song)*

We are happy you can see!
We're the girls who play safely.

*Boys:*

We are happy you can see!
We're the boys of Town Safety.
*Caution Play Area (sign):*
Here the children really care!
They play safely everywhere.

*Playing children:*

If we're careful when we play,
We can have fun every day.
Only one is on the swing,
and nobody will fall,
But two are on the see-saw,
and everyone plays ball.
*Policeman at crossing: (to people in car)*
Everyone is glad that you have come to see
The town where no one can be hurt,
because we live safely.

*Traffic light:*

Hey, mister, you there, in that car,
Keep your mind on where you are.
My light changed, and you must have seen;
You cannot go until I'm green.

*Second child:*

O.K., sir, or Mrs. Light,
If we watch you we'll be all right.
*(Slow sign on stage)*

*Slow sign:*

This is the edge of town, my friends,
Now, slow down, for this road bends.

*Children in car:*

Thank you, sign, for all you've done,
You're safety to everyone,
Safety Town, we'll ne'er forget . . .
Our visit to you and how we met.
Safety, then, is when you do
For others as they should to you.
Now we travel far and wide
With safety always at our side.

# Developing A Safety Program for Your College or University

***By Daniel Webster***
***Staff Representative, Higher Education***
***School and College Division***

THE question frequently is raised, "Which should come first: engineering aspects of safety, enforcement, education or the creation of positive attitudes in regards to accident prevention?"

The answer may lie in answering the question, "Which is most logical, or the easiest to do first?" By and large, initial emphasis should be placed on the creation of an environment *conducive* to education, and enforcement where needed. Conversely, it would be ironical and time wasting to discuss fire prevention and protection in a classroom or college situation where poor housekeeping, lack of adequate fire detection and fire fighting equipment, alarms and other protective measures were lacking. The first emphasis must be on teaching by example.

For this reason the outline of recommended organization and activities which follows begins with the emphasis placed on creating as model a safe environment as possible. Educational activities should be developed at the same time, or as soon after environmental safety measures are taken as possible. But successful teaching of knowledge, skills, and the attaining of safe attitudes is highly improbable unless preceded by administration's demonstration of practicing what it teaches.

*An Outline for a Suggested Program of Safety Education and Accident Prevention in a College or University*

I. Administrative Leadership and Safety Policy by Head of College or University

A. Prepare written policy to indicate personal interest and support.

B. Place responsibilities and authority for prevention of accidents.

C. Invite and expect each staff member and student to contribute to program.

D. Establish patterns and approaches, not details of program.

E. Make policy known to every staff member and student through publication and distribution.

II. Safety Organization

A. Appoint a qualified person, functioning in a staff capacity under the head of the college or university, serving in the full-time or collateral role of safety coordinator, supervisor or other suitable title.

1. He should have both the interest and time to spend on safety education and accident prevention.

2. His functions should include the preparation of a master plan of safety programming including unit safety organization, inspections, review and analysis of staff member, student and public accidents, fire prevention and control, safety promotion, preparation of rules and regulations, encouragement of safety education and training.

3. He should not endeavor to do all of the safety work himself, but should work with staff members and organizations within the college in the attaining of safety objectives.

4. He periodically advises the Head of the college or university of progress, and recommends desirable action for adoption.

B. A strong functional safety committee should be appointed by the head of the college or university.

1. Membership should include key staff members representing major areas and types of operations, such as Deans of Students, Dean of Instruction, Director of Buildings and

Grounds, College Physician, Financial Officer, student representative of student organization.

2. Normally, the ranking member should serve as Chairman, and the designated safety coordinator should serve as Secretary.

3. Meetings should be held at regularly stated intervals, preferably monthly, and a record kept of all reports and proceedings. Findings and recommendations should be transmitted promptly to the Head of the college or university for desired action.

4. Functions performed by designated members or sub-committees should include inspections; review of accident reports; training of new students and employees, in job skills, fire prevention, evacuation, and basic fire fighting; and related activities.

5. Universities with large enrollments and campuses should appoint College or Department Safety Committees, with a designated representative (usually the Chairman) also serving as a member of the Central Safety Committee.

C. College or university, and departmental faculty and staff meetings should be utilized for the discussion of pertinent accident-prevention problems or practices recommended by the Safety Committee.

D. Student organizations should be encouraged to play an active role in the program, and wherever possible should be given responsibility and authority for carrying out functions such as safety in student residences, student driving, and other campus activities.

III. Safety Measurement and Analysis

A. Develop and enforce procedures for the written reporting of all injuries occurring on campus, and in college and university supervised off-campus facilities or activities.

B. Utilize orientation programs and student guides for outlining and stressing the importance of accident reporting.

C. Record and investigate circumstances and causes of all accidents regardless of severity of injuries. Develop and use standard forms.

D. Review accidents individually and collectively to determine common and unusual causes, needed safety programming, trends, and costs.

IV. Placement and Training

A. Determine minimum physical requirements for new students and employees based on study of skills and physical capacities needed in courses of study and positions.

B. Require complete physical and medical examinations of entering students and prospective employees including faculty members, by the College or University Health Service or Physician.

C. Integrate accident-prevention information, precautions, rules, and training in orientation programs for new students and employees.

D. Provide periodic physical examinations for students and personnel with chronic conditions who are engaged in strenuous activities, and following injuries and illnesses.

V. Safe Conditions and Engineering Revisions

A. Conduct complete surveys of all buildings and grounds annually to detect physical hazards, and to assist in budgetary considerations.

B. Create system of daily inspections by charging each faculty or staff member with the responsibility for his own operational area.

C. Arrange periodic and seasonal inspections for specific conditions or areas, such as housing, fire fighting equipment, alarms, lighting.

D. Give priority to the replacement of outmoded or overloaded wiring, and substandard construction.

E. Abandon and replace temporary frame structures used for housing, shops, and classrooms.

F. Provide automatic fire detection devices and fire alarm systems, particularly in student residences and storage areas. Install sprinkler systems in storerooms.

G. Improve storage facilities, and provide isolated, explosion-type buildings for storage of bulk volatiles.

H. Provide maximum fire protection in

*(Continued on page 24)*

# Are Simulated Autos "Doing the Job" in Training Our Future Drivers?

**Yes, say five driver educators. We asked them: "In your experience, is behind-the-wheel training on the Aetna Drivotrainer or other simulated devices, as valuable as training in the dual-control car, in driver education programs?"**

*VIRTUS W. SUHR, Research Associate, Driving Research Laboratory, Industrial Science Research Institute, Iowa State College, Ames, Iowa.*

THE use of simulated auto devices in driver education classes is not new. Lane Technical School in Chicago is one of the pioneers in this area. Under the leadership of William Sears, Lane inaugurated the use of dummy cars in driver education in 1937. But behind-the-wheel training in a regular automobile was not entirely eliminated. Every student was given some driving practice behind the wheel of an automobile in an off-street practice area. The amount of this practice was varied to meet the needs of individual students.

In recent years, the use of simulated auto devices has been accentuated. Two such devices, the AAA Auto Trainer and the Aetna Drivotrainer, are currently on the market. The amount of research on the effectiveness of such devices in the training of drivers is limited.

One part of the study conducted at Iowa State College and reported before the American Association for the Advancement of Science on December 28, 1954, was designed to determine the usefulness of the Auto Trainer in driving classes. While it was not possible to draw rigid conclusions from this study, findings indicated that supplemental training on the Auto Trainer will improve performance test score, particularly in steering and observation time.

The results of the Los Angeles study of the Aetna Drivotrainer, reported in 1955, indicated that practically the same progress in driving skill and knowledge will be experienced by a student trained by either the experimental method, using the Aetna Drivotrainer plus three hours of on-the-road training, or the California State prescribed course. The latter required six class hours of behind-the-wheel instruction in a dual-control automobile. The criteria included knowledge, attitude and performance tests.

An investigation of the effectiveness of the Aetna Drivotrainer in driver education classes was conducted at Iowa State Teachers College recently. This study, published in 1956, indicated that results produced using the Drivotrainer and three hours of dual-control-car instruction were at least as satisfactory as the results produced by the standard method of instruction involving six hours of dual-control-car instruction. The major criterion was a 146-point check list marked by the instructor as he rode with the student while the latter drove for 30 minutes over a standard route on public streets and highways.

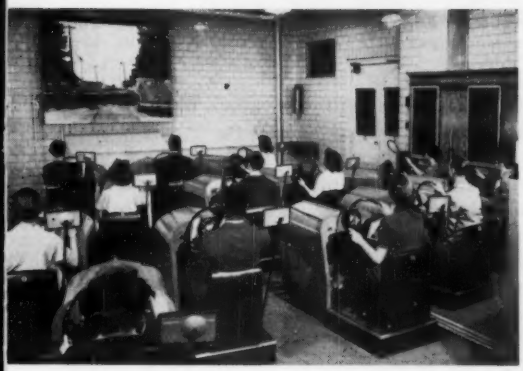
Research to date indicates that a certain amount of the behind-the-wheel training conventionally given in a dual control automobile can be replaced by behind-the-wheel training on a simulated auto device without altering the student's progress in a driver education course. More needs to be known about the learning curve for automobile driving.

It appears, however, that the value of behind-the-wheel training on simulated auto devices will be a supplement to and not a substitute for behind-the-wheel training in a dual control automobile.

*DR. LONNIE GILLILAND, Director of Safety Education, Oklahoma City Public Schools, Oklahoma City, Oklahoma.*

The Oklahoma City public schools have two eight-place Drivotrainer units. These units are located in the Central and Capitol Hill high schools and have been in use in the driver education program for two years. Enrollees in the evening or adult classes are also taught on this equipment.

We believe the Drivotrainer contributes a great deal toward the improvement and expansion of the program. We are able to reach



*Can much dual-control car time be replaced by training on simulated autos? At left: driver education class practices on the Aetna Drivotrainer. Below: Dr. Leslie Silvernale helps a student in a dual-control car at Michigan State University.*

more students and, at the same time, develop more efficient drivers than can be developed through the traditional method.

The Drivotrainer makes it possible for the instructor to move about the classroom and give individual help to students who are in need of it. The recorder automatically records the score for each student, giving the instructor an accurate record of each one's performance.

The errors recorded on the score sheet can be reviewed with the class and an individual record made for each member of the group. These individual forms offer an opportunity for checking the growth of each pupil in the class as the course progresses.

Our programs in which the Drivotrainers are used include 22 hours of classroom instruction, 12 hours on the Drivotrainer, two and three-fourths hours behind-the-wheel, and eight hours observation in the car.

We believe the Drivotrainer will do more toward bringing about a standardization of driving rules and regulations on a national basis than anything done in the past.

***R. D. NOLAN, Instructor, Highway Traffic Safety Center, Michigan State University, East Lansing, Michigan.***

Basically, I think we must look to the original purpose for which the Aetna Drivotrainer was designed and then decide upon its merits. The Drivotrainer was designed to *reduce,* not *eliminate,* costly on-the-road time in a dual-control car.

With the ever-increasing numbers of students who are now entering our driver education classes, the efficient use of teacher time and a reduction in per pupil costs should be given top priority in the operation of any program.

A top quality program must be maintained, in which we think not merely in terms of manipulative skills, but in the development of broad social attitudes toward driving and the ability to make and execute proper decisions in accordance with the needs of changing and complicated traffic patterns.

The Drivotrainer, with its varied film content, presents, through progressive stages, practically every phase of driving. Part of the student's behind-the-wheel experience can be brought to the classroom situation where basic fundamentals and the formation of good attitudes and good judgment can be closely related to other areas of the student's study.

At Michigan State University, "beginning drivers" participating in an experimental program involving the Drivotrainer are given additional behind-the-wheel experience in handling an automobile in traffic situations. Time spent in traffic varies with individual abilities. However, observations to date indicate that, in most instances, we have been able to *reduce* a substantial amount of time spent on the street in a dual-control automobile without a subsequent loss in quality.

***MELVIN T. SCHROEDER, Supervisor of Driver Instruction, Los Angeles City Schools, Los Angeles, California.***

Before discussing this question it is essential that two important premises be established. One, that education is interested in placing on the highways the safest, most skillful drivers; second, that this be achieved most economically.

*(Continued on next page)*

## Are Simulated Autos "Doing the Job" in Training Our Future Drivers?

*(Continued from preceding page)*

There are driver education teachers and administrators who believe that there is only one effective approach to the teaching of practice driving—the use of the dual control car.

It is my firm conviction that there are other methods of efficiently teaching practice driving and that the use of the Aetna Drivotrainer is one of these methods. This statement is based on the results of the 1954 Drivotrainer study conducted by the Los Angeles City School Districts, and the utilization of these devices for the past year-and-a-half at Reseda High School. The study established several significant facts, but, most important, it indicated that the use of the small classroom devices, in combination with three hours behind the wheel of the dual control automobile, is equally as effective as the six hours in the automobile alone; it proved that it is more economical; and more students can be trained than in the conventional method.

State departments of education have an important responsibility in this subject area to aid school districts in the expansion of practice driving and the exploration of all possibilities that tend to decrease costs. The California and Michigan state departments of education have recognized the value of Aetna Drivotrainers and approve the use of these devices for reimbursement purposes, which is indicative of their confidence in such a program.

A comparison of the number of pupils trained in 1956-57 at Reseda High School with the number trained at other schools emphasizes the value of the Drivotrainer. Approximately 720 Reseda High School pupils completed driver education, with four teachers, twelve Drivotrainers, three dual control automobiles and a five-period day. An identical number of teachers (four) using only dual control automobiles were able to train only 560 pupils during a similar period of time. From the standpoint of economics alone, the Drivotrainer program resulted in a saving of approximately $7,000.

It is my feeling that continued expansion of the behind-the-wheel program will be dependent upon lower per-pupil costs. We look to the state departments of education for leadership and encouragement, and to those industries and research organizations which have the know-how and initiative to develop devices which, when used in conjunction with present methods, will bring about reduced costs in practice driving instruction.

***ALFRED C. BARNES, JR., Assistant to the Director, Safety Education, Iowa State Teachers College, Cedar Falls, Iowa.***

Iowa State Teachers College was selected in 1954 as one of the three locations in the United States to do research with the Aetna Drivotrainer. The purpose of this research was to assess the worth of the device as a replacement for part of the dual-control-car instruction found in standard high school driver education programs. The program, under the direction of Bert Woodcock, director of safety education, Iowa State Teachers, conclusively established that Drivotrainer instruction could be substituted for at least half of the amount of expensive on-the-road time in a dual control automobile. The results were as good or better than those experienced with the conventional course.

My own experience and observation during the past year with the Drivotrainer have borne out the conclusions obtained from our research findings. By using the Drivotrainer, the teaching of skills such as shifting, proper coordinated use of clutch and accelerator, turning maneuvers, etc., can be accomplished faster and better than I was able to do in a dual-control-car.

We have found that group skills can be taught more effectively on the simulated device. For example, there are many skills and judgments involved in parallel parking. Many instructors have termed this type of parking as the most difficult of all driving maneuvers. Yet group after group of the students who participated in the research project could go out in the dual-control-car and *successfully* complete parallel parking maneuvers after an hour *or less* instruction on the Drivotrainer. Consequently, the transfer of learning from an ideal situation to an actual situation has proven highly successful.

However, we must be aware that there is a great deal more to driving than skills. To be a good driver one must be a safe driver. This involves the development of proper mental attitudes toward driving, and the knowledge of what to do in emergency situations. The Drivotrainer makes it possible to give the students training which we could not possibly duplicate on the road due to the hazards involved. Thus far, my experience has been in accord with the findings of the research done at Iowa State Teachers, research which points out that "Results produced using the Drivotrainer and three hours of dual-control-car instruction were at least as satisfactory as the results produced by the standard method of instruction involving six hours of dual-control-car instruction."●

# Safety in the Sheet Metal Shop

*MODERN production methods and the increasing demand for comfort and convenience in modern living have challenged industry to develop many new and better products made of sheet metal.*

Among those in common daily use are summer and winter air-conditioning units for home and office, new-styled automobiles, new design in airplanes for faster travel, all-metal railroad coaches, metal storm doors and windows for the home, refrigerators, metal desks, lockers and files for home and office.

Because of the increased use of sheet metal, more types of new handling and forming equipment are presenting more hazards to sheet metal work, hazards to which students should be introduced before entering the modern metal working industry.

This data sheet endeavors to bring out general rules applying to areas covered. For more specific information on each area of sheet metal shop safety, consult *Suggested Information Sources* at the end of the data sheet. These resources bring out in greater detail complete safety precautions in the use of specific sheet metal shop machines.

Consideration in this data sheet has also been given allied trades, without which no sheet metal shop could function efficiently.

**Statistics**

*Accidents in the School Shop*

1. National statistics on school jurisdiction accidents in the sheet metal shop are incomplete and inadequate. However, a composite of available information, listing the areas of industrial education according to comparative rating in frequency of accidents, would appear as follows: woods, 12.0; metals, 11.0; transportation, 6.6; communication, 5.9; graphic arts, 3.3.

2. In the metals area, *the frequency of accidents in the machine shop is higher than in all other shops combined.* Exposure may be an important reason for this and must not be overlooked. The general metal and sheet metal shops rank second and third, but with far fewer accidents.

*Accidents in the Industrial Shop*

3. A report on the frequency of injuries in

*(Continued on next page)*

NATIONAL SAFETY COUNCIL
425 N. MICHIGAN AVE., CHICAGO 11, ILL.
Copyright 1957

## *Safety in the Sheet Metal Shop*

**safety education data sheet number 83**

*(Continued from preceding page)*

industry caused by machines and their severity, covering a five-year period, was made by the Massachusetts Industrial Commission. The report appears at the bottom of the page.

4. Other accidents caused by objects falling on feet, cutting hands when handling metal, falling over objects thrown on the floor, and numerous other acts of carelessness for which no statistics are available, would surpass those caused by machine tools and metal forming machines combined.

### The Problem

5. Since safety is so vital in the conduct of any sheet metal shop, safety rules should be carefully explained and strictly enforced by the shop instructor, and observed by the student. Both parties are equally concerned, because an injury resulting in loss of time is a detriment to both student and instructor. Instructors should stress to students that intelligent observation of safety rules protects their ability to gain useful trade knowledge which can be of value in their economic future.

6. Students should learn and always remember that the metal shop is a team in which each person is dependent upon careful and conscientious adherence to safety provisions by his fellow worker. Therefore, the work of each person has a direct effect on the safety and security of all the others working in the shop.

7. Safe practice in sheet metal work includes:
   a. General safety rules
   b. Protective equipment
   c. Safety guards used in power-driven machinery
   d. Cutting and forming metal with hand tools and machine tools
   e. Hand riveting and pneumatic riveting
   f. Forging angle rings and other structural shapes
   g. Welding seams and joints by both the electric and acetylene welding methods
   h. Field erection work and sketching which involve the installation of safety guards, duct work and equipment
   i. Soldering.

### General Safety Rules

8. All protective devices for a particular job *must* be used, and *never* must anyone tamper with a safety device in any way.

9. Floor space must be kept free of tools, metal trimmings and refuse.

10. Students must wear a shop apron, tied in the back. Long hair must be held in place so that it won't get caught.

11. Accidents must be reported *as soon as they*

*Disability distribution per 1,000 injuries and average number of days lost per temporary total injury by type of metal-working machine causing the injury.*

| *Type of Machine* | *Disability Distribution per 1,000 injuries* | | | *Average number-of days lost per Temporary Total Injuries* |
|---|---|---|---|---|
| | *Fatal and permanent, total* | *Permanent, partial* | *Temporary, total* | |
| **Metal Working Machines** | | | | |
| *Metal Forming Machines* | | | | |
| Cold Metal Forming Machines | (1) | 292.24 | 707.75 | 30.14 |
| Hammers | (1) | 245.61 | 754.38 | (1) |
| Presses & Punches | (1) | 314.33 | 685.66 | 30.68 |
| Rolls | (1) | 140.84 | 859.15 | 27.88 |
| Shears | (1) | 203.12 | 796.87 | 26.64 |
| *Machine Tools* | | | | |
| Abrasive Wheels | 2.50 | 74.22 | 923.26 | 17.74 |
| Circular Saws | (1) | 155.17 | 844.82 | (1) |
| Drills | (1) | 57.25 | 942.74 | 26.41 |
| Polishing and buffing | 3.47 | 41.66 | 954.86 | 20.32 |

*(1) Rate not shown because base is less than 50.*

*occur*. Get proper first aid for any injury.

12. Running is absolutely prohibited in the shop. Students should always walk. Any horseplay cannot be condoned.

13. A student who is over-tired or not feeling well should avoid operating a machine.

14. "Out of order" signs or other clear indication of disrepair should be posted on machines that are not working, and no one should use them until they have been repaired.

15. No one should walk or work under a loaded crane.

16. In operating sheet metal working machinery, the operator stands away from the counterweight on the brake.

17. Fingers should be kept clear of the apron and head when using the brake.

18. Loose clothing, long sleeves, gloves or a necktie should *never* be worn while operating rotary machines or the drill press. Neckties should be removed or tucked in well, sleeves should be rolled above the elbows, rings and wrist watch should be removed.

19. Hands must be kept free of the dies or punches when using the punch press. Tongs should be used to handle the work.

20. The student *must* keep his mind on his work. Day-dreaming and inattention cause most of the accidents. Distracting another student while he is working at a machine may also cause serious injury. Strict attention to the job at hand is necessary to prevent accidents.

**Protective Equipment**

21. Always wear safety goggles when working on the band saw, grinding, chipping, forging, brazing, dipping metals in acids or transferring acids and corrosive liquids from a bottle to a container. Special safety goggles must be worn when welding or working near welders.

22. Leather gloves must be worn with a gauntlet for welding.

23. Rubber gloves must be used for handling acids and corrosive liquids.

24. Work gloves of leather or cotton are needed for handling rough castings or newly sheared metals.

a. Students should be instructed in the proper way to handle sheet metal. They should be warned against allowing the sheet metal to slide through their fingers.

b. Sheet metal should not extend into the aisles from the benches.

c. Stakes should be handled carefully and stored to provide protection from pointed ends. They should not be left lying around.

d. "Corner guards" should be provided.

25. *Never* should gloves be worn when operating any rotating equipment.

26. Proper tongs should be used for handling hot metals. Gloves cannot be depended upon for complete protection.

27. When welding, working with a burner or any hot or molten metals, the student must learn to protect himself with a leather apron and leather gauntlets.

*Safety Guards Used on Power-Driven Machinery*

28. All exposed belts and drives should be guarded. Money spent on guards is a profitable investment. It more than compensates for the cost of a single serious injury.

29. The machine operator should never repair his machine. This is the work of a machine repair man.

30. Local standard safety codes should be followed in the design of safety guards.

31. Safety guards must be firmly fastened to machines or floor with sufficient clearance between the pulleys and the guard to prevent the belts from coming in contact with the guard. Loose guards or guards with insufficient clearance are safety hazards.

**Cutting and Forming with Machine and Hand Tools**

*When Operating the Band Saw*

32. There is always a danger that the saw blade may break. This can be caused by forcing the work beyond the capacity of the saw or by a poor splice. The material used for the wheel enclosure guard should be heavy enough to contain a broken saw and equipped with hinged covers to make saw replacement easier.

33. Trimmings should be disposed of immediately after cutting.

34. When cutting a small piece or strip of metal on the band saw, the work must be held with another piece of metal. Fingers should never be placed past the shear guard.

*When Operating the Drill Press*

35. Guards are not practical on machines with revolving tools, such as a drill press. Loose sleeves, gloves and long neckties should never be worn. Work should always be clamped when boring; never held by hand. Long metal shavings are dangerous and should be cleared up immediately with a brush.

36. A chuck key for removing drills should be attached to the machine for ready use. It should be removed from the chuck before the

*(Continued on next page)*

machine is started. Never should a file handle and hammer be used to remove drills.

37. The electric shut-off switch on a drill press should be placed in an easily accessible position to the operator.

38. The following should be checked before proceeding with work: correct speed, correct bit, work clamped to the table, belt guard replaced, chuck key removed.

39. The drill should not be allowed to fall when it is removed.

40. The machine must be stopped if any adjustments are to be made.

### Metal Shears

41. The square shear, common to all sheet metal shops, is the cause of many disabling injuries, particularly amputations of fingers.

42. A barrier guard constructed of expanded metal set less than the thickness of the fingers above the flat surface of the shear, will make it impossible for the operator to reach under the knife. The hold-down device, which descends as a holding clamp, should be positioned between the knife and the guard to protect the operator's fingers from being pinched by the holding clamp.

43. An operator should *never* reach over the shear to catch small pieces being cut off. Let them drop to the floor.

44. When two operators are required to handle material being sheared, the operating mechanism should require that both operators' hands be on the controls before shears can be tipped.

45. The circular shear is the least hazardous of the metal shear equipment. If required, a semi-circular guard can be installed around the top cutting blade with a minimum of clearance to permit safe operation.

46. The shear should be locked when the student has finished using it.

47. Keep feet clear of foot treadle.

*Metal Brake*

48. Metal brakes can be hydraulic or electric. The accident hazard common to the sheet metal brake is pinching the fingers. An adjustable top table, which will place the metal on a level with the jaws of the brake and permit the operator to adjust the metal readily to the required braking line will aid in the elimination of this hazard.

*Cold Metal Rolls*

49. This group of metal forming machines consists of two or more individual rolls and is used for bending, crimping, corrugating, knurling or otherwise changing the shape of thickness of metal. Rolls present a much smaller hazard than other cold metal forming machines because of their slower speed.

50. The most frequent cause of accidents in operating this type of machine is having the clothing of the operator drawn into the rolls. The best prevention against such accidents is not to wear loose clothing when operating this type of machine. The machine control should be placed as near the run-in point as possible, so that the operator can stop the machine if his clothing gets caught in the running rolls.

*Cold Metal Forming Hammers*

51. Cold metal hammers have a bad accident record, the most hazardous of which is the changing of dies. When changing dies it is good safety practice to block up the hammer with heavy pieces of timber and use an adjustable top table so that the die can be slipped into place without lifting.

52. Stop the machine and lock it out to clean, oil, adjust or repair it. Place a "Danger—Do Not Start" sign on the switch box.

53. Fingers should be kept outside of the guard while operating the shear.

54. When the die is in the punch press, tongs or hooks should be used to remove the work. *Hands should never be placed between the dies.*

*Grinding*

55. Before using a portable grinder, condition of the spindle, grinding wheel, recommended wheel speed, and electrical connections should be checked.

56. Whenever possible, a screen should be used to protect others from flying chips and particles of the wheel. Safety goggles should always be worn when grinding.

57. The hands should never touch the grinder.

58. When working on the grinder, gloves should never be worn, nor should the work be held with a cloth. Either of these might get caught in the machine, with sad results.

59. The student should stand to one side of the wheel when turning on the grinder.

*Drills*

60. Check to see that the spindle, electrical connections and drill point are in good condition before working with the drill. Be alert for breaking drills.

61. Never force a drill. If it should jam, the

resulting "kick," on the larger sizes, can sprain or fracture a wrist.

62. Keep hands away from the front of a revolving drill.

63. Always support a portable drill with one hand, resting the supporting hand against the metal being drilled.

64. To prevent the chuck end of a snake drill from whipping, support it with the right hand. Do not release the hand until motor stops.

65. Gloves should never be worn when operating a drill.

66. Do not try to tighten a drill in the chuck until the spindle stops.

67. Get the drill started in the hole before you throw on the automatic feed.

68. Be slow and cautious when a drill is breaking through a piece. Withdraw the drill and clean out the chips frequently when a drill has entered work beyond the flutes.

*Hand Tools*

69. Mushroom-headed punches, sets, drifts and chisels should be exchanged for tools in good condition. *Never* use a mushroom-headed tool.

70. Don't use a hammer with a chipped face or a cracked or splintered handle.

71. Always check to see that hammer handle and wedge are tight.

72. Any edge tool should be carried with the sharp edge *down*. Pointed tools should be held with the points down.

73. Keep sharp or pointed tools out of the pockets.

74. Use tongs to hold objects which you are hammering or pounding.

75. It is unsafe to use a monkey wrench as a hammer.

76. Never use a file without a handle.

**Hand Riveting and Pneumatic Riveting**

77. Guard against shooting the riveting gun by accident. Keep your finger behind the trigger and point the gun to the floor when not using it.

78. When rivet sets become too short for safe use, discard them.

**Forging Angle Rings and Other Structural Shapes**

79. Be sure that you're using the right size and type of tongs for the job.

80. The student must always use cool tongs. They should be cooled frequently to avoid danger of burns.

81. Never hammer on cold steel. It may split or crack.

82. It is very easy to break two pieces of hardened steel by striking them together.

83. Tools should be kept sharp at all times. Never work with dull equipment.

84. Check to be sure that the handles on all tools are tightly secured before using.

85. Goggles should always be worn for grinding.

86. Never lay hot iron on a tool bench, where someone might pick it up.

87. Always look to see that no one is passing behind or beside you before you swing a sledge hammer. Check overhead clearance of swing.

88. Always open the doors of a gas furnace before lighting it. There may be a leak.

89. Keep the floor free of tools and scraps.

**Welding Seams and Joints by the Electric and Acetylene Methods**

90. A leaking tank should be removed from the building immediately to avoid an accumulation of explosive gas.

91. All hose connections should be made with the proper clamps or connectors. A wire should never be used for this purpose.

92. No one should weld in or near a room which contains flammable vapor resulting from dipping or spraying. When you must weld or cut in the vicinity of combustible materials, be sure that the fire hose, extinguishers of the proper type, fire blankets and fire pails are available.

93. Sweep wood floors clean, wet them down, and, whenever possible, cover them with a metal protector before beginning to weld over them.

94. If slag or sparks can drop through the floor, make certain that the floor below contains no combustible material. Make sure other persons are not in that area.

95. Use sheet metal guards, asbestos blankets or asbestos curtains wherever they are needed to confine slag, sparks and glare to the immediate vicinity of the welding.

96. Gas given off by welding on galvanized material is hazardous. Proper ventilation must be obtained for protection against these fumes.

**Gas Cutting and Gas Welding**

97. Under no circumstances should anyone work alone in tanks or boilers.

98. Under no circumstances should anyone start to cut or weld tanks of any size or description without first determining whether dangerous gases or dust are in the tank. Blow tank out with steam until the tank is thoroughly

*(Continued on next page)*

## Safety in the Sheet Metal Shop

*(Continued from preceding page)*

heated by the steam. Acid tanks should be thoroughly rinsed several times to prevent formation of hydrogen. Always examine the inside of the tank first with a flashlight or safety type electric light. Also check what is on the other side of the object being welded before starting to cut.

99. When a weld or cut is complete, quench the work before leaving or mark it to show that it is still hot.

100. Never use a cylinder, empty drum or barrel as a support for your work.

101. Always wear safety goggles when you are grinding or chipping.

102. Examine the hose carefully for leaks, cuts and worn places at least once a week. Place it under normal working pressure, immerse it in a bucket of water and observe carefully for bubbles. Gathering bubbles indicate a leak: the faulty section should be removed and hose re-spliced using a standard connector.

### Oxygen Cylinders

103. Use no oil or grease near oxygen or any equipment through which oxygen passes. Oil or grease may ignite violently in the presence of oxygen under pressure. Therefore, never use greasy gloves or rags when handling oxygen cylinders or in working around them.

### Acetylene Cylinders

104. Keep the acetylene cylinder upright, unless it is impossible to do so; in that case, raise the outlet slightly. This will prevent the acetone from running out. Keep the valve protection caps on cylinders.

105. Never use any defective equipment or attempt to repair welding equipment yourself.

106. Make sure that the hose is properly connected. Use a hose clamp instead of a wire.

107. Put nothing, except a standard cap, on top of an acetylene tank. You may damage the safety plugs.

108. Tanks should not be rolled on the floor.

109. The tip of the torch must not be left inserted in any barrel or tank.

110. Warm water, never boiling water or a flame, must be used to thaw out an outlet valve that has become clogged with ice.

111. Never crack the acetylene cylinder near other welding or cutting work, or any possible source of ignition. Always keep the acetylene outlet pointed away from the oxygen cylinder.

112. Flush out a new hose with oxygen gas before using. Never use acetylene gas for this purpose.

113. Always leave the "T" wrench on the tank in order that the cylinder may be shut off quickly in an emergency.

### Arc Welding

114. Never, under any circumstances, look directly into the welding arc with the naked eye.

115. Obtain first aid immediately after exposing the eyes to the full glare of the arc at close range.

116. Be sure that your helmets and shields are free from cracks.

117. Students must learn that the colored glass in their welder's goggles must always be protected from metal splatter by using a plain glass that is replaced easily and inexpensively.

118. The skin of face, hands and arms must be covered to prevent burns from the rays.

119. Leather gloves must be worn to protect hands from spatter, arc rays and hot objects.

120. For overhead welding, a welder's cape should be worn to protect neck and shoulders.

121. Do not operate the polarity switch while welding.

122. Do not operate the voltage or current regulator while welding.

123. Always pull the main switch and lock out before starting to work on live circuits which are supplying power.

124. Always ground the arc welding set to prevent shock from stray currents.

125. Always leave the electrode holder on an ungrounded piece of material or in a special holder. It should never be placed on a metal table or any other grounded device.

126. All cable connections should be checked to see that they are properly made and are not allowed to work loose. They should never be operated while they are hot.

### Field Erection Work and Sketching Which Would Involve the Installation of Safety Guards, Duct Work and Equipment

127. The foot of a ladder should be one-fourth of the ladder's length away from the wall against which the ladder is leaning.

128. Never leave tools on top of a stepladder or on any other elevated place from which they may fall.

129. Ladders should be placed against a solid, stationary backing. Keep metal ladders away from places where electric shock may be encountered.

130. Always face the ladder when ascending or descending. Use both hands.

131. Use only ladders that are in good repair. Never use a broken or a weak ladder or a ladder with missing rungs.
132. Make certain that ladders are safe and secure before attempting to climb them. Tools and material can be hoisted or lowered *after* you have safely climbed or descended.
133. Ladders must not be used unless they are equipped with proper safety shoes.
134. Men working in elevated locations must place proper warning signs; and, if possible, protect other workmen by roping off dangerous sections. Be certain scaffolding is strong enough to support you and your materials and is securely fastened to structure.
135. Wear safety shoes and a metal helmet to protect your feet and head from falling objects. Do not walk or stand beneath crane loads.

**Soldering**

136. Soldering coppers should be kept in a definite place and not left lying around. Hot soldering coppers should not be carried around the shop.
137. Students should not leave hot soldering coppers unattended in the shop. Others might get burned.
138. Electric soldering irons should be turned off when not in use.
139. Students should be warned of the danger of burns from soldering flux and acids, and against eating while working with soldering flux. They should keep their hands away from eyes and mouth when soldering.
140. Breathing excessive fumes while soldering is hazardous.
141. All acids should be stored in a safe manner and in proper containers.

**Selected Information Sources**

142. Industrial data sheets from the National Safety Council, 425 No. Michigan Ave., Chicago 11, Illinois, handle each of the following subjects completely, and sheet metal shop instructors who wish more information about various aspects of safety with machines and environment in the sheet metal shop may wish to order them. Those which are pertinent to the sheet metal shop situation are: Nos. 213, *Alligator Shears;* 216, *Metal Shapers;* 232, *Removing Oil and Grease from Metal Parts;* 236, *Method of Locking Out Electric Switches;* 266, *Die Casting Machines;* 283, *Liquid Oxygen;* 286, *Slippery Floors;* 299, *Grounding of Portable Electric Equipment;* 322, *Metal Saws (Cold);* 328, *Metal Squaring Shears;* 335, *Metalworking Drill Presses;* 363, *Kick (Foot) Presses;* 365, *Individual Die Guards and Adjustable Press Barriers;* 383, *Metal Planers;* 445, *Hand Soldering and Brazing.*
143. *Safe Work Practice in Sheet Metal Work,* by G. Harold Silvius and Gerald Baysinger. Chicago, Ill.: American Technical Society. 1949. 70 pp.
144. *Safety Guide for Shop Teachers.* San Francisco Public Schools. 130 pp.
145. *Shop Safety Education.* Albany, New York: The University of the State of New York, The State Education Department. 1949. 319 pp.
146. Safety Education Data Sheet No. 43, *Safety in the Machine Shop.* Chicago, Ill.: National Safety Council.

## Safety Education Data Sheets available are:

(1) Bicycles
(2) Matches
(3) Firearms, Rev.
(4) Toys and Play Equipment
(5) Falls
(6) Cutting Implements
(7) Lifting, Carrying and Lowering
(8) Poisonous Plants
(9) Electric Equipment
(10) Pedestrian Safety
(11) School Buses—Administrative Problems (Rev.)
(12) Flammable Liquids in the Home
(13) Passenger Safety in Public Carriers
(14) Chemicals
(15) Hand Tools
(16) Nonelectric Household Equipment
(17) Sidewalk Vehicles
(18) Camping
(19) Alcohol and Traffic Accidents
(20) Cooking and Illuminating Gas
(21) Solid and Liquid Poisons
(22) Safety in the Gymnasium
(23) Laboratory Glassware
(24) Places of Public Assembly
(25) Fireworks and Blasting Caps
(26) Domestic Animals
(27) Swimming
(28) Small Craft
(29) Play Areas
(30) Winter Driving
(31) Night Driving
(32) Winter Sports
(33) Traffic Control Devices
(34) Safe Conduct in Electrical Storms
(35) Poisonous Reptiles
(36) Motor-Driven Cycles
(37) Animals in the Classroom
(38) Railroad Trespassing
(39) Bad Weather: Hazards, Precautions, Results
(40) School Parties
(41) Home Workshops
(42) Horseback Riding
(43) Hiking and Climbing
(44) Hook and Line Fishing
(45) Summer Jobs—Farm
(46) Safety in the Wood Shop
(47) School Fires
(48) Unauthorized Play Spaces
(49) Bathroom Hazards
(50) Safety in the General Metals Shop
(51) Safety in Pupil Excursions
(52) Highway Driving, Rules, Precautions
(53) Safety in the Machine Shop
(54) Summer Jobs: laborers, home yard, service-stations
(55) Motor Vehicle SPEED
(56) Welding and Cutting Safely
(57) Safety in the Auto Shop
(58) Winter Walking
(59) Safety in the High School Chemistry Laboratory
(60) Safety in the Farm Mechanics Shop
(61) Floors in the Home
(62) Hazards of Discarded Iceboxes and Refrigerators
(63) School Bus Safety: Educating Pupil Passengers
(64) Safety in the Graphic Arts Shop
(65) Safety in Part-Time Jobs: Food Handling
(66) Baby Sitting
(67) School Dramatic Productions
(68) Safety in "Do-It-Yourself"
(69) Playground Apparatus
(70) Safety with Kites and Model Airplanes
(71) Safety in Sports: Baseball
(72) Safety in Sports: Football
(73) School Bus Safety: Operating Practices
(74) Playground Surfacing
(75) Safety in Sports: General Practices
(76) Safety in Bad Weather Conditions
(77) Safety in Sports: Basketball
(78) Safety for Amateur Electricians
(79) Coordinating Safety in Industrial and Vocational Education Programs
(80) Counselors and Helpers in Summer Camps
(81) Gun Clubs: Their Organization and Activities
(82) Office Safety
(83) Safety in the Sheet Metal Shop

Data sheets from SAFETY EDUCATION are available for a small fee from the National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. Bound volumes of the data sheets may be purchased from the Council at $3.89 each for one to nine copies.

## *Developing a Safety Program for Your College or University* *(Continued from page 13)*

places of public assembly.

I. Install guards on machinery, where lacking, and insist on their use.

J. Provide adequate parking facilities and utilize standard traffic control devices and markings.

K. Correct other hazardous conditions, such as defective walks and roofs.

L. Provide and insist on use of personal protective shoes, goggles, aprons and other equipment.

VI. Safety in Emergencies

A. Provide or secure police service for on and off campus traffic control.

B. Obtain 24-hour watchman service.

C. Give specific instructions to all staff members and students for securing emergency services, supporting such instructions in writing, and by conspicuous posting in all operational areas, hallways, and on bulletin boards.

D. Hold regular fire drills and evacuation of all buildings, including residences.

E. Make available prompt and adequate emergency medical service through an adequately staffed and equipped health service on the campus, and through prior arrangements with local physicians and hospitals. Provide accident insurance for students and staff members to supplement care which may be given by the college or university.

F. Establish relationships and utilize community preventive and protective services in conjunction with inspections, training and safety promotion, and emergencies.

VII. Promotion of Interest in Safety

A. Make safety a continuous selling job.

B. Use catalogues and student guides or handbooks to call attention to safe rules and procedures, and the need for cooperation.

C. Utilize campus newspapers to point up seasonal hazards and timely safety messages.

D. Use posters and bulletin boards.

E. Apply standard safety color code to designate fire equipment, first aid supplies, dangerous machinery. Use signs to call attention to hazards as well as safe procedures, emergency exits and equipment.

F. Sponsor "safety" and "no accident" competition amongst units.

G. Encourage student projects such as safety surveys of fire extinguishers or housing, driving tests, preparation and enforcement of safe procedures and regulations.

VIII. Safety Education.

A. Establish and conduct a model program of accident prevention, through the personal examples of safety practices by faculty and operational staff members, and providing as hazard-free buildings and grounds as may be attainable.

B. Require first aid training for all staff members and students.

C. Instruct all students in the basic principles of accident prevention, including procedures for inspecting work areas or classrooms to detect hazards, reporting of accidents and follow-up, liability and related information.

D. Integrate accident prevention knowledge and skills in all courses, particularly those of a laboratory nature.

E. Require safety courses in line with the student's present or future occupational exposure, such as laboratory and operating room safety for medical students.

F. Provide driver education instruction for those students who do not know how to drive at the time of entering college or university.

G. Develop in-service courses, including courses for teachers responsible for teaching safety education or driver education.

H. Encourage and sponsor needed research.

### ASSISTANT IN SAFETY EDUCATION

**On December 14 the New York State Department of Civil Service will conduct an examination to fill the position Assistant in Safety Education in the Department of Education. The salary range is $6140 to $7490 in five annual increases. Candidates must be New York State residents and must have a Master's Degree with specialization in safety education and satisfactory experience in the education field.**

**An Assistant in Safety Education performs field and office work in the promotion and improvement of programs of safety education in the schools of the State. For details write before November 15 to Recruitment Unit, New York State Department of Civil Service, 39 Columbia Street, Albany, New York.**

# Does Your Community *Back the Attack* on Traffic Accidents?

***Unit Number Seven — School Traffic Safety Education***

***An Experiment in Education for Democratic Community Living***

This unit is one of a series. Unit Number One is a general introduction to all traffic units; Unit Numbers Two through Six are on police supervision, ordinances, engineering, courts and accident records respectively. Unit Number Eight on public safety education will be published in the December issue of SAFETY EDUCATON, and Unit Number Nine, on safety organization, in the January issue.

There is a Teachers' Guide available. If you do not have it, the Guide plus any of the units you may be missing will be sent you upon request. Write on school letterheard, enclosing a stamped, self-addressed envelope, to the School and College Division, 425 No. Michigan Ave., Chicago 11, Ill.

***Back the Attack Lesson Unit Number Seven***

*Prepared by Vivian Weedon, Ph.D., Curriculum Consultant, School and College Division, National Safety Council, Chicago, Ill.*

**(Questions based on Section Seven of the *Annual Inventory of Traffic Safety Activities.)***

**Sources of Information**

There are several somewhat official statements of policy in regard to safety education in the schools:

a. *For safety education supervision:* "Recommended Standards for Administration," SAFETY EDUCATION, December, 1951. (Reprints available from the School and College Division, National Safety Council.)

b. *For driver education:* "Policies and Practices for Driver Education," developed by the National Conference on Driver Education, Michigan State College, East Lansing, Michigan. November, 1953. Published by the National Commission on Safety Education, National Education Association, Washington 6, D. C. 94 pp. Price: 75 cents.

c. *For school traffic patrols:* "Recommended Procedures for School Traffic Safety Patrols," written and periodically revised by representatives of six educational and safety organizations, published by the American Automobile Association, the National Safety Council and, possibly, by the National Commission on Safety Education, National Education Association.

The provision for crossing protection around the school is the joint responsibility of the schools, police and traffic engineers. See *Index* on "School Crossing Protection," in *Traffic Engineering Handbook:* Institute of Traffic En-

## SUGGESTIONS FOR WORD STUDY

Below is a list of words arranged alphabetically. Read over questions one through thirty-three. Whenever you find a word you do not understand, look for it on this list. If you find it, write the number of the question in which it appears after the word, thus: *abilities (7)*

If you do not find the word on the list, write it, with the number of the question, on a piece of paper. Then look up all the words in the dictionary.

abilities
affiliated
analysis
behind-the-wheel
certification agency
classroom course
coordinating
crossing protection
(Will you find this in the dictionary?)
curriculum
demonstration
directing
environment
evidence
extension courses
intensive
off-street parking
opportunities
painted crosswalks
relationship
representative
seminars
summaries
supervising
unloading zone
workshops

gineers, Washington, D. C., 1950. 514 pages.

The various reports of the White House and the President's Highway Safety Conferences, including the Action Program, will outline, in general, various phases of the school traffic safety program.

d. *For finding out what is going on in your community.* For your own schools, you can find a great deal of information simply by interviewing administrators, teachers and other pupils. If your school puts out an annual report, much information can be secured there. Do not forget, however, that there may be other school systems in your community. Be sure to get a complete picture of the safety education activities that are going on in all schools. Your local and state courses of study or teacher's guides may be very helpful.

*The information below should be secured for all of the school systems in your community.*

1. Do the boards of education employ one educator and charge him, or her, with responsibility for directing, supervising, or coordinating a broad program of safety education in the entire school system operated by that board? Find out the name of this person in your school system. He or she should be a valuable resource person in helping you do your part in traffic safety. Find out the names of these people in the other school systems in your community.

2. Do the schools have active safety committees composed of:
   a. faculty?
   b. faculty and students?
   c. faculty and parents?
   d. faculty and representatives of community groups?

If not, how many schools have such committees? Do any of them have other types of people on the committee? Is there an over-all safety committee in your school system? Is this affiliated with your local safety organization?

3. Do your schools, working together with all official and interested non-official groups, conduct a continuing analysis of conditions and needs in crossing protection for boys and girls going to and from school? If so, find some changes that have been made as a result of this analysis.

4. What types of crossing protection do the streets near your schools have? For example:
   a. school traffic safety patrols (for control of pedestrians only)?
   b. adult crossing guards?
   c. traffic police?
   d. traffic signal lights?
   e. overpasses (bridge over street)?
   f. underpasses (tunnel under street)?

5. Are there any schools in your community which need no crossing protection, as in the case of a school where all children come to school by bus?

6. What opportunities have the teachers to learn to teach *safety* better, such as:
   a. serving on curriculum committees?
   b. attending seminars?
   c. attending extension courses?
   d. attending summer sessions?
   e. attending workshops?

f. attending teachers' conferences or meetings?

7. Have there been any other opportunities for the teachers of your community to prove their abilities to teach safety?

8. Have some of the opportunities mentioned in questions *six* and *seven* been limited only to certain schools or school systems, or have all had a chance? If they have been limited to some schools or school systems, which ones? Is there any way the other teachers might be given similar opportunities?

9. What types of instructional materials are available to teachers of your community, such as:

a. curriculum guides?
b. visual aids?
c. current supplementary material (manuals, bulletins, pamphlets, etc)?
d. radio programs?
e. demonstrations?
f. other?

10. Can you find out about any other type of instructional material to help the teachers of your community help the students learn to live safely? Are these materials available to all teachers or only to teachers of some schools and some school systems?

11. What specific projects relating to traffic safety are going on in the schools of your community, such as:

a. inspection of bicycles?
b. determining the safest way to and from school?
c. conducting teen-age conferences?
d. conducting field trips to places of traffic safety interest?
e. conducting a student safety organization?
f. other?

12. What other projects in traffic safety can you find going on in your schools?

13. Is there any evidence that these activities are helping the boys and girls of your communities to live more safely?

14. Are safe ways of walking taught? Find out what, when and where pedestrian safety is being taught. Is there any evidence that the boys and girls are safer pedestrians because of this instruction?

15. Is the safe way to ride a bicycle taught? Find out what, when and where. Is there any relationship between the time the boys and girls in your community start to ride bicycles and the time this teaching is done? Is there any evidence that the boys and girls of the community are safer bicycle riders because of this teaching?

16. Do all of your high (or junior high) schools give a classroom course in driver education? What is the relationship between the time this course is given and the age at which students can get driver's licenses? Do all boys and girls take this course? Could all of them take it if they wanted to?

17. How many class hours of classroom instruction are given in this course? Is this the same in all schools?

18. Do all of the schools offer driving instruction in the car?

19. For behind-the-wheel driving in the car, how many hours does each pupil receive? Could all students take the behind-the-wheel course if they wished to?

20. Is there any evidence that the boys and girls in your community who take driver education in school are safer drivers than those who do not?

21. Do any of the schools in your community have driver education courses (study in classroom and actual practice in driving cars) for adults? If so, find out about these courses.

22. Have all the teachers who are teaching driver education in the schools of your community a certificate to teach driver education issued by the state certification agency?

23. If not, how many have such a certificate? What steps are being taken to get such a certificate? What are the requirements for the certificate?

24. Find out what special education these teachers have had for teaching driving:

a. a one-week intensive course?
b. a two-week intensive course?
c. a summer session course (how many weeks?)?
d. a full semester course?

25. How many teachers have a "minor" in driver or safety education? ("Minor" is the term used by colleges to indicate a certain number of hours in specified subjects.)

26. Do the schools of your system have a record-keeping plan so that traffic accidents happening to children attending their schools are recorded, no matter what time of day or night they occur? If only some schools have such a record, find out which ones do have such a system and what use is made of the records.

27. Are summaries of these accident reports sent to the National Safety Council? How do you think sending them to the National Safety Council could benefit your community? How

*(Continued on next page)*

## *Back-the-Attack* Unit Number Seven. *(Continued from preceding page)*

could it benefit other communities?

28. Locate any summaries or analyses of such accident records and study them to see if you can find out activities which your community might engage in to make a safer community.

29. Find out examples of instances when the summaries were used to make the environment safer—to improve safety instruction.

30. What steps have the schools in your community taken to make the school surroundings (environment) safe for boys and girls? Some provisions that should be made are:

a. Unloading zone for parent cars and school buses.

b. Off-street parking areas for faculty and other school employees.

c. Painted crosswalks at school crossings.

d. Elimination of parking in front of the school.

31. Have any other steps been taken to make the school environment safer from the point of view of traffic hazards?

32. Do other official and non-official agencies assist the schools in traffic safety and traffic safety education? If so, find out what assistance is given by each.

33. If your community is cooperating in the *Annual Inventory of Traffic Safety Activities,* find out what recommendations are made under the Section, "School Traffic Safety Education." Is there anything which you, as an individual, can do to help get these recommendations adopted? Is there anything which you, with the help of other students, can do to help get these recommendations adopted? Is there anything the adults of the community can do to get these recommendations adopted?

34. If your community is not cooperating in the *Annual Inventory of Traffic Safety Activities,* try to answer the above questions in the light of the recommendations made for one community and given below:

"a. That additional instructional materials be provided.

"b. That a student accident report system which provides traffic accidents occurring at any time of day or night to all school-age children be installed.

"c. That summaries and analyses of accident data be made available to all faculty members and maintenance personnel.

"d. That more special projects be provided for students.

"e. That driver education be expanded to include all eligible students for practice driving."

## Views AND REVIEWS

Ford Motor Company has released three new driver education films—two for their Driver Training Series, one on a new concept for developing safe driving attitudes.

*Pedestrians* and *Automatic Transmission* are parts of the Training Series. Both black and white, the films run ten minutes and are cleared for television.

*Automatic Transmission* explains various types of these transmissions, shows how they operate, with special attention to starting, short and long stops, accelerating for passing, parking. Detailed instruction includes rocking the car, using low gear on dry or slippery pavement, climbing or descending hills. Some safety tips on driving are also given.

*Pedestrians* uses the driver's viewpoint in watching out for the pedestrian—what to look for, clues to the invisible pedestrian, hidden traffic signals, special hazards when children are present, stopping dangers, etc. The pedestrian's responsibility for his own safety is not overlooked.

The new concept of teaching (and developing) proper driving attitude is presented in *The Smith System,* an eight-minute, black and white film. Five driving habits are illustrated which, if developed, can help eliminate distractions which cause accidents. These habits are indicated as: "Get the big picture," "Aim high in steering," "Keep your eyes moving," "Make sure they see you," and "Leave yourself an out." Each are explained in some detail with action illustrating their application. The technique is a type of defensive driving for the private motorist—whether a new or experienced driver.

These films can be borrowed or purchased from Ford Motor Company, Motion Picture Department, The American Road, Dearborn, Michigan.

NOVEMBER 1957

## Lower Elementary

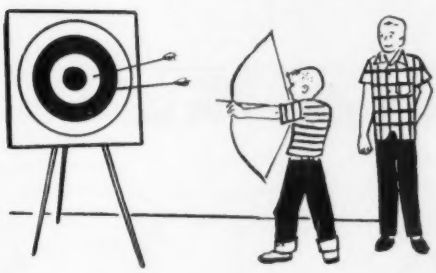
# safety lesson

## Firearms

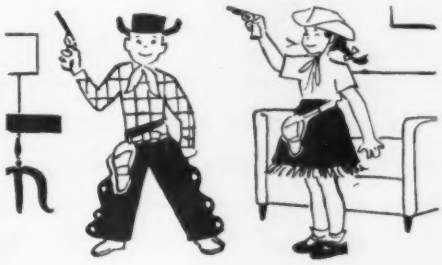
S-1120-A

*Fill in the blanks with the following words: Hit, guns, never, away from others, adult, no one. (Answers below right.)*

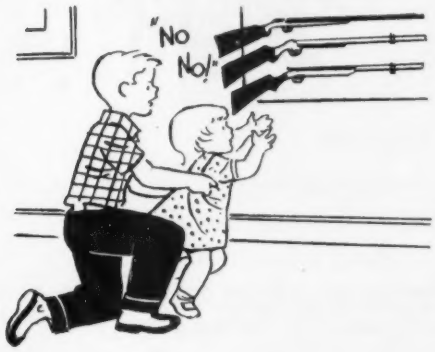
1. When we are playing any target game, we see that ____ _____ is close to the target. We have an _____ around to help us play safely.



2. We always point our toy guns _____ _____ _____ when we aim.



3. We _____ touch grown-ups' _____. We never _____ anyone with the butt of a gun.




Write three more safety rules you have learned about guns, both toy guns and real guns. Discuss the rules you have written down with the class.

*Example: We should explode caps only in our cap guns and never by pounding them on the sidewalk.*

*Prepared by Miss Ruth Jewell, State Music Consultant, State Department of Public Instruction, Raleigh, North Carolina. Printed by the School and College Division, National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. One to nine copies, ten cents each. Lower prices for larger quantities. Published in the U.S.A.*

*Answers: 1. No one, adult; 2. Away from others; 3. Never, guns, hit.*

*Mark an X on the things that are wrong in the following pictures. Make a sentence showing what would make the picture safer.* (Answers below)

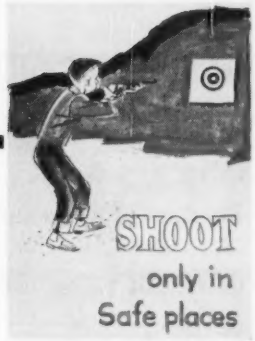
1. I feel like stretching. I think I'll spread out my feet.

2. I like these puzzles. This is a nice thing to do on a rainy day.

3. We try to be careful walking in the hall. Which side of the hall do we walk on?

4. How do we carry chairs?

*Answers: 1. We should always keep our feet under our desk. 2. We play quietly with our puzzles and do not throw them. 3. We walk on the right side of the hall. We watch for doors that might open suddenly. 4. We carry our chairs in front of us.*




S-1120-A

NOVEMBER 1957

**Upper Elementary**

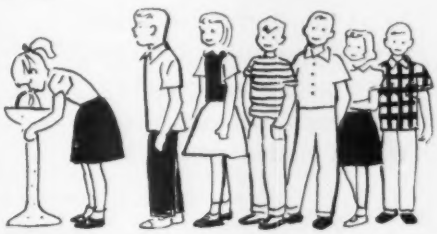
# safety lesson

## The Courteous Way

*Check the picture which shows the courteous and safe way. Tell what is unsafe in the other picture. Discuss your answers with the class.*

*1. Let's get his face wet.*

*2. We wait our turn at the fountain.*



*3. We walk in an orderly line down the hall so that others may pass us.*

*4. Let's make this class move over.*

### Some Things To Do

1. Name some safe games for a rainy day.
2. Discuss safe practices for going down the hall.
3. What are safe practices for the lunch room?
4. What are some good rules for behavior around the water fountain?
5. Draw pictures to illustrate the above.

*Prepared by Miss Ruth Jewell, State Music Consultant, State Department of Public Instruction, Raleigh, North Carolina. Printed by the School and College Division, National Safety Council, 425 No. Michigan Ave., Chicago 11, Illinois. One to nine copies, ten cents each. Lower prices for larger quantities. Published in the U.S.A.*

# Gun Safety

*Match the following phrases so they will make complete sentences. Fill in the blanks with the letters of the correct matching phrases.*

1. Treat every gun as if it were loaded _____.
2. Never carry a _____ gun into your home, camp or public place.
3. Always be sure your gun barrel is clean _____.
4. Carry your gun so you can control the direction of the muzzle _____.
5. Never point a gun at anything _____.
6. Be sure of your target _____.
7. Guns not being used _____.
8. Never climb a tree or fence or jump a ditch _____.
9. Never shoot at a flat, hard surface _____.
10. Respect _____.

a. or at the surface of water.
b. before you pull the trigger.
c. other people's property.
d. and ready to shoot.
e. with a loaded gun.
f. loaded or cocked.
g. even if you stumble.
h. should always be unloaded.
i. and not plugged.
j. you do not want to shoot.

# Blasting Caps

Many boys and girls are badly hurt when they find and play with blasting caps. These caps explode frequently, and sometimes children lose fingers and hands, or are blinded for life. When a cap explodes, hundreds of small pieces of metal fly out in all directions.

Blasting caps are small copper or aluminum cylinders about as big around as a lead pencil and between one-and-a-half and five inches long. They contain a highly sensitive explosive. There are two kinds of caps. The more common cap is exploded when a fuse which is inserted in one end of the cap is lighted with a match. The other kind is an electric blasting cap. This one has two wires coming out of one end. These two wires are connected *inside the cap* by a very thin wire sunk into the explosive charge within the cap. When electric current is applied, the wire becomes red hot and ignites the cap.

If a blasting cap is found, *it should be left alone.* Other boys and girls should be warned. A report should be made immediately to a fireman, policeman, sheriff or other law enforcement officer.

Draw pictures from descriptions of the two blasting caps. Make two sentences telling the two things that should be done if a blasting cap is found.

| 1. Ordinary Blasting Cap | 2. Electric Blasting Cap |
|---|---|
| | |

*Answers to the matching question at top of page: 1-d; 2-f; 3-i; 4-g; 5-j; 6-b; 7-h; 8-e; 9-a; 10-c.*

NOVEMBER 1957

## Junior High School

# SAFETY LESSON

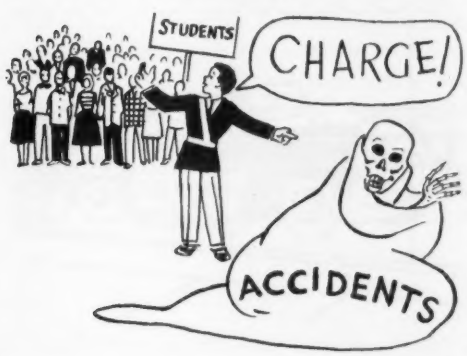
S-1121-A

## Back the Attack

### Losing the Battle?

**During 1956, 40,000 people met their deaths in traffic accidents. This is an all-time high! Are we losing the battle against accidents? Will the figure for this year be higher, and for 1958 higher yet? In war, one of the ways to overcome an advance by the enemy is to counter-attack. The National Safety Council is using that strategy by intensifying its campaign against traffic accidents.**

### Will You Back The Attack?




### How Can You Help?

As a student you have the responsibility of helping to stem the tide of accidents in your school and community. Your school is a "fort" where you can draw information, plan strategy and receive aid from experts. Start now to get familiar with the services that are available in your school and community to combat accidents. Find out how you can help. Here are some suggestions:

1. Is there a safety organization in your school; or does the student council handle all safety problems? In either case, find out what has been done by the organization during the past year in regard to accident prevention. If there is no safety organization as such, how can you go about starting one? (Write to the National Safety Council for free information.)

2. Compile a "Who's Who in Safety" for your school and community. List the names of the presidents and other officers of each organization that deals specifically with accident prevention, and the organizations that include safety as part of their programs. Mimeograph the list and give all members of the class a copy.

3. Is there a local safety council in your community? When does it meet? How active is it? What are its stated purposes?

4. While most of us think of the police department as a law enforcement agency, and the fire department as a department that puts out fires, both agencies have definite safety programs. Become familiar with the programs. Is there a specific policeman in charge of traffic control? What about policewomen? What part do they play in accident prevention?

5. What kind of training do the people who deal with traffic problems have to undergo? Are special tests required for the policemen or policewomen who are on duty at the crosswalks? What are the physical requirements for being a member of the police department?

6. All forty-eight states participate in the *Annual Inventory of Traffic Safety Activities.* Write to your state authorities for a copy of these recommendations for your state. See if the recommendations are being followed in your community.

*Prepared by Dr. Vincent McGuire, Associate Professor, Secondary Education, University of Florida, Gainesville, Florida. Published by the School and College Division, National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. One to nine copies, ten cents each. Lower prices for larger quantities. Published in the U.S.A.*

## Charge!

After you have become familiar with the programs of local safety agencies and organizations, determine how you, as a group, can fit into the safety picture. Don't just *know* what is going on to prevent accidents—join the battle! Some suggestions are shown below:

1. Establish an awards program. For example, a "Safety General" might be named each month as doing the most to "Back the Attack" on accidents. The "General" could be a local safety official, a policeman, a fireman, a student, or anyone who has demonstrated that he is doing a good job in preventing accidents. Naming the "Safety General" could be part of a monthly assembly program, or could be incorporated in a newspaper article. In addition, your local radio or TV stations would probably cooperate by announcing the winner each month. Selection of the monthly winner can be done by a committee from your class.

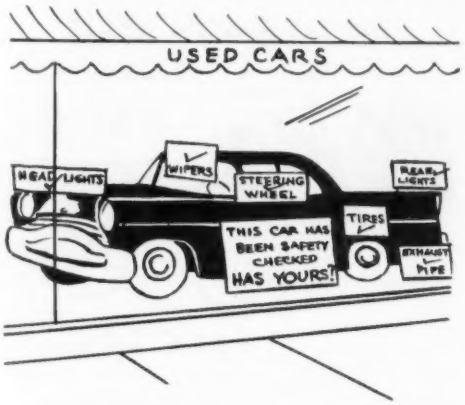
2. Write a letter to your local safety organizations asking what you as students can do in the community to help solve the accident problem. Describe what you have done so far and enclose a copy of your "Who's Who in Safety."

3. Prepare a three- to five-minute talk on the necessity for greater emphasis on safety. Contact local civic organizations such as Kiwanis, Rotary, Lions, etc., and ask if you can deliver the talk at the beginning of one of their meetings. Be sure you organize an interesting and informative talk. For example, you might start off with the following:

> "Gentlemen, during the time it took Mr. Smith to introduce me, and during your applause, _____ (number) people died and _____ people were injured in accidents.
>
> (Pause)
>
> I have come to talk to you about this problem . . ."

4. Prepare window displays in your community stores. While most merchants cooperate in any kind of safety drive, it might be wise to plan your display so as to help the merchant's business as well as to promote safety. For example, you could letter "Prescription for Safe Driving" on a poster that is designed to look like a doctor's prescription blank. Then list the rules of safe driving on the poster and ask permission to place it in a drugstore window. Then suggest to the druggist that he make a display of first aid kits in the same window, with a large sign reading, "Just in case the other guy doesn't follow the rules."

A local auto dealer would probably place one of his used cars in the display window for you. You could then prepare a large sign reading, "This car has been safety checked—has yours?" Cards in the forms of checks can be placed on the car pointing to: brakes, headlights, rear and stop lights, tires, steering and wheel alignment, exhaust system and muffler, windshield wipers, glass, horn, and rear view mirror. Label each check card with the foregoing appropriate part.




5. Confer with your police department in regard to traffic laws that may not be clearly understood by the general public, or laws that need clarification for people passing through your town. For example, are you *certain* that it is legal in *your* community to turn right on the red signal? Find the answers to similar questions and publicize the law. A poster display entitled, "What is the Law?" could be placed in a store window. Each week a different traffic law could be publicized.

**Remember, in a democracy *all* people must help solve common problems. Help *Back The Attack* on accidents in your community!**

NOVEMBER 1957

## Senior High School

S-1121-A

# SAFETY LESSON

## Back the Attack

### The Problem

**During this month, people all over America will pause in silent tribute to those Americans who died fighting for our way of life. Such a tribute is just and proper—yet one can't help but wonder what the dead would think of one phase of our way of life today. To die in a war for a just cause is understandable; but to die needlessly on the highways in traffic accidents is disgraceful! Yet more people are killed and injured in accidents *each year* than were killed and injured in any major war we have fought. What can be done about this problem? In addition to pausing to honor the dead, can we take time to plan to save the living? Will we "Back the Attack" on accidents?**

### The Approach

The National Safety Council has long waged a war against accidents and has encouraged others to join the battle. During 1956, the traffic accident toll reached a new high. In order to meet this problem head-on, the National Safety Council intensified its program and called for an all-out effort to combat accidents. President Eisenhower, governors of various states, and numerous other governmental leaders gave their wholehearted support to this "Back the Attack" movement. No movement, however, can be successful unless everyone does his part to help.

### Gain Information

In order to lend whole-hearted support to the "Back the Attack" movement, you must first gain information about the problem and about local facilities that are available for helping to solve the problem. Appoint a class chairman to lead a discussion on the following questions:

1. Does your school have a safety council, or is accident prevention a responsibility of the student council? In either case, what kind of program has been in effect during this year to cut down on accidents? If you don't have a school safety council, should you start one?

2. Is there a safety council in your community? If so, how often does it meet and what kind of program has it established? If there isn't a local safety council, do community leaders, the police and fire departments, and the mayor think there should be one?

3. What program does your police department have for prevention of traffic accidents? Who is in charge of the program? What training is required for those who administer the program?

These and other pertinent questions must be answered before you can take any intelligent action. If the answers are not produced through discussion, assign individuals to get the answers.

*Prepared by Dr. Vincent McGuire, Associate Professor, Secondary Education, University of Florida, Gainesville, Florida. Published by the School and College Division, National Safety Council, 425 No. Michigan Ave., Chicago 11, Ill. One to nine copies, ten cents each. Lower prices for larger quantities. Published in the U.S.A.*

### Take Action!

Next month, December, is usually the peak month for traffic accidents. Prepare *now* to cut down on the accident rate so that the Christmas season will be a joyous one. During the Christmas week-end in 1956, 706 immediate traffic deaths were recorded from 6:00 p.m. December 21, to midnight, December 25. But 179 more people died later as a result of motor vehicle accidents in which they were involved during that week-end. In other words, during a season of "good will toward men," people were being killed at the rate of seven each hour in traffic accidents!

Here are some suggestions to help you "Back the Attack."

### Support Your Officials

When we are trying to do a good job, a word of praise or recognition makes us want to work harder. We all know this yet how many times have the officials of your community received recognition for their efforts? One way to "Back the Attack" is to establish a recognition program for the officials in your community who are doing a good job of traffic accident prevention. Appoint several committees—one for each phase of community organization, such as fire department, police department, city government, etc.—to pick the outstanding person each month. The winners can then be recognized by official letters of citation from your school. An alternate plan would be to select one person each month and name him "Safety General of the Month." This could be

done at a school assembly program or in a newspaper article.

During election time, make it a point to ask any candidate for office what his proposed traffic safety program is. Publicize the need for good traffic safety plans by writing letters to the editor of your local newspaper asking that candidates outline their proposed safety programs.

### Participate in Local Safety Activities

Make a list of "Who's Who in Safety" for your community. Include the names of local organizations that promote safety and the officials of such organizations. Study their programs. Develop a plan whereby you can support the safety programs of the organizations. The school safety patrol is a good example of school support of the

police department's traffic program. A survey of needed signs and crosswalks; cleaning brush from vacant corner lots to improve traffic visibility; and an analysis of needs for additional policemen or policewomen are just a few possible avenues of action.

### Personal "Crackdown"

You should make a sincere inventory of your faults, both as a driver and as a pedestrian. Do you *know* all the safety rules, and *not* follow them as you walk home from school? Do you drive your car at an excessive rate of speed in order to get to a traffic safety meeting on time?

How *consistent* are you in regard to what you know to be right, and how you act?

Start now to list the pedestrian and driving rules that should be followed in order to cut down on traffic accidents. Develop programs that will *constantly* remind students and parents of the safety rules to be followed. Utilize the art talent in your class to make attractive posters for display throughout the school. Get permission to use the intercommunication system of the school for daily reminders of traffic safety. Devise short tests of traffic safety to be given during homeroom period.

Make an all out effort to "Back the Attack" on traffic accidents!

# New Products

### Dor-Gards Protect Fingers

Dor-Gards have been developed for entrance doors to protect children's hands against mashing in the closing space between doors and frames. The new device is constructed of heavy-duty extruded vinyl and has multiple flexpoints to eliminate cracking even under heavy use. Aluminum moldings with self-threading screws facilitate easy application to both sides of pivoted or hinged metal or wood doors. Moldings and screws are not visible after installation. Dor-O-Matic Division, Republic Industries Inc. (Item 1)

### Eye-Wash Fountains for Laboratory and Gym

Designed for use wherever students are exposed to material hazardous to eye or body, the Haws Emergency Eye-Wash and Drench Shower Facility will prove valuable. It is designed to provide immediate, effective first-aid in the laboratory, athletic department, workshop and similar areas. The Eye-Wash has twin fountain heads, with automatic volume and pressure controls, to project streams of water safely into the eyes, flushing out dangerous matter. Haws Drinking Faucet Co. (Item 2)

### "Burn Releef" Aerosol Spray for Burns

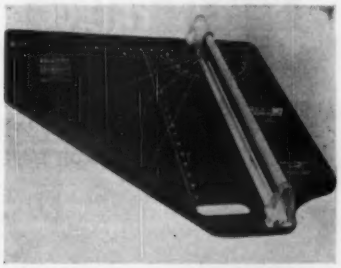
A new method of first-aid treatment of minor burns has been developed by the Interstate Precision Products Corporation of Anaheim, California. It's an aerosol spray containing Allantoin, an ingredient which stimulates healing and encourages rebuilding of new tissue. No need for painful rubbing of greases into the wound; no swabs, hands or applicators need touch the patient. BURN RELEEF just sprays on. It is claimed that BURN RELEEF is excellent, too, for cuts, abrasions, sunburn and other minor surface injuries. (Item 3)

### Combination Lock Operates by "Clicks"

Lock Type 40, the Master Key Combination Lock, is a new model which operates merely by counting the number of "clicks." It helps solve the problem of locker security and permits safely-controlled inspection quickly and easily. The new lock has a slot at the bottom where a new-type of master key is inserted for emergencies and inspection. One key only is needed to open all combination locks in the series, and the master key cannot be duplicated by any commercial key machine. The strong, rugged lock has a die cast case to protect all parts from water or moisture. C. L. Gougler Keyless Lock Co., Kent, Ohio. (Item 4)

### Safety Cutter

Replacing the guillotine-type office trimming board is a new cutting instrument, with built-in safety, called the Slide-N-Cut Safety Cutter, which is activated by one action, the movement of the cutter head along the polished chrome rod. Based on a cutting board of smooth, durable Masonite Tempered Presdwood, the device is the only paper cutter with a built-in protractor for cutting angles.



Slide-N-Cut will take 18" paper, cardboard, plastic sheets, light leather or carbon paper. Up to 16 sheets or more may be inserted under the progressive clamp, which holds the material firmly without fanning for the accurate, precision cutting. No holding of material by hand is required. The device has a replaceable blade in the cutter head with four cutting edges.

Safety Cutter Sales Co. (Item 5)

---

**SAFETY EDUCATION** **NOVEMBER 1957**

**425 N. Michigan Ave., Chicago 11, Ill.**

Please send me more information on the items circled below:

1 2 3 4 5

Name .....

Title .....

Address .....

City .....

State .....

## Elkow appointed safety director at Wisconsin . . .

Professor J. Duke Elkow has been appointed lecturer in education and director of safety education at the University of Wisconsin. Elkow, previously associate professor of health and physical education at Brooklyn college, took his new position September 1.

Elkow is head of one of the most advanced programs for preparing teachers of safety education. The University's new program was made possible by a $50,000 grant from the Wisconsin Mutual Insurance Alliance.

Holding a B.S., M.A. and Ph.D. from New York University, where he has been a research assistant at the Center for Safety Education, Elkow also has written and edited many safety publications. As a member of the School and College Conference of the National Safety Council, Elkow will head the N.S.C. 1958 Congress School and College Program Committee.

## chart educates possible firefighters . . .

Information on selecting fire extinguishers is available in a chart form, free of charge, from the Fire Equipment Manufacturer's Association.

The chart lists basic types of extinguishers and shows at a glance which type to use for certain types of fires. The fires are categorized into three groups: Class A, wood, paper, rubbish; Class B, volatile liquids, and Class C, electrical fires.

Also included on the chart are the elements used in each type of extinguisher, the effects of using each type on certain fires, and the operating ranges for each.

Copies are available by writing the Fire Equipment Manufacturers' Association, Inc., Suite 759, One Gateway Center, Pittsburgh 22, Pa.


SAFETY PATROL
RAINCOATS

With Distinctive
PATROL EMBLEM

High Visibility YELLOW Rubber Raincoats with Matching Cape Cap. Completely Vulcanized and 100% Waterproof. Attractive Safety Patrol Emblem on Coats (as pictured) lends Distinction and Authority. Sizes 12 to 20.

• PATROL SUPPLIES
*Patrol Badges, Belts, Armbands, Flags, Headwear, Footwear.*

• CROSSING GUARD
*Raincoats, Stormcoats, Headwear. Belts and Badges.*

Samples on Request

WRITE FOR SAFETY PATROL BROCHURE

Conney Products Co.
FOND DU LAC, WIS.


# BULL

## hands off blasting caps . . .

Blasting caps are the chief source of accidents from explosives, causing many deaths and maimings every year. These tragedies occur when blasting caps fall into inexperienced hands of adults and children. Inadequate storage facilities and failure to return unused caps to their proper place are cited as two other causes for these accidents.

The Institute of Makers of Explosives is attacking this problem with a campaign to educate the public. The Institute will teach children to recognize blasting caps—and to leave them alone.

A display board of dummy caps accompanied by a study discussion sheet is available for child education. This kit also includes posters for explosive users, and can be obtained by writing the Institute, 250 East 43rd St., New York 17, N. Y.

## explosive pellets mistaken for candy . . .

Salt Lake City police asked grocers and candy store owners to rid their stores of "Cracker Balls"—gay-colored explosive pellets—because three children were injured when they mistook them for candy.

The pellets contain gunpowder and sand, having as much powder as a paper pistol "cap". The pellets come in penny cellophane bags, with only the name marked on the outside and no other identification that they are not candy.

Police are still debating whether or not the sale of these pellets is illegal.

# LATE NEWS IN SAFETY EDUCATION

AN IMPORTANT ANNOUNCEMENT ABOUT A CHANGE IN PROCEDURE FOR ORDERING PRINTS OF NATIONAL SAFETY COUNCIL RENTAL FILMS.

On January 1, 1958, the National Safety Council turns over its film rental libraries to Association Films, Inc. who will handle bookings, shipments and billings direct with the customers. From that date, please address and send orders for rental or loan prints to Association Films, Inc., *not to the National Safety Council.*

Association Films, Inc., have four distribution offices: Ridgefield, New Jersey (Broad at Elm); La Grange, Illinois (561 Hillgrove Ave.); San Francisco, California (799 Stevenson); Dallas, Texas (108 Jackson). To speed bookings, send requests to the office nearest your locality.

The Council is accepting rental and loan bookings for dates up to and including December 1, 1957. Orders for preview and purchase prints should always be addressed and sent directly to the National Safety Council.

## teens form junior police force for bike safety . . .

Twenty-five teen-age boys in Franklin Park (outside Chicago), formed their own junior police force to enforce bicycle safety in their community.

The force is under the direction of the park recreation director, and works in close cooperation with the city police. Here's how these young "policemen" operate: The boys work with the city force getting all bicycles registered and instructing all cyclists on the rules of the road. Violators must face the junior police court.

For a first conviction, violators receive a lecture, while repeaters are fined from five to 25 cents. Members of the junior force wear a star on a cap similar to a bus driver's, and can be admitted to the force only by a letter of recommendation from a teacher.

*A safety puzzle in which children are asked to point out the unsafe acts in the picture, this ad is one of a series to be run in a comic book by The Wrigley Company, gum manufacturers. Answers, pointing out safety rules, are given at the bottom of the ad.*


**START NOW IN YOUR ELEMENTARY GRADES!!!**

**It's New!! It's Wonderful!!**

**"The A B C's of Safety"**

A workbook designed to teach pedestrian safety to elementary school children. Ten verses covers 12 lessons with an appropriate drawing to color. Teacher's instructions for each lesson.

Can be used by itself or with any visual aid available to the teacher

School Prices
Single Copy $.60 ea. (please remit with order less than $3.00)
12 or more copies $.48 ea. net
F.O.B. Phila.

PLAY ART

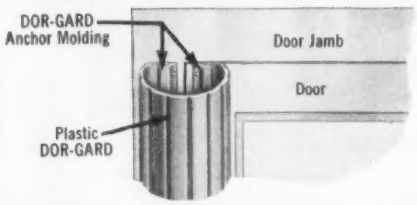
DISTRIBUTED BY
PLAY-ART EDUCATIONAL EQUIPMENT COMPANY
116 South 20th Street, Philadelphia 3, Pennsylvania
EDUCATIONAL MATERIALS AND EQUIPMENT

# "Finger Proof"
## Your Doors with *DOR-O-MATIC*
## DOR-GARDS®

DOR-GARDS is the trade name for finger guards which protect against mashing or mangling of careless fingers and hands (especially children's) in the closing space between doors and frames.

There is no question of negligence . . . no liability . . . no drawn-out lawsuits . . . no settlements running into hundreds, thousands of dollars *because* DOR-GARDS *prevent accidents from happening.*

Works on ALL types of doors . . . long lasting vinyl . . . won't crack . . . easy to install . . . nothing shows but the DOR-GARD. Designed and developed by makers of the famous DOR-O-MATIC INVISIBLE DOR-MAN automatic door operators and concealed in the floor DOR-O-MATIC MANUAL DOOR CONTROLS.




*WRITE today for complete information on* DOR-GARDS *and name of dealer nearest to you.*

8031

*DOR-O-MATIC* division of REPUBLIC INDUSTRIES, INC.

**7372 West Wilson Avenue, Chicago 31, Illinois**


## TRADE PUBLICATIONS

**The following publications are intended for the guidance of those responsible for the purchase of equipment to promote safety in the school. The coupon below will bring FREE to responsible school personnel any or all of those listed.**

1. An illustrated folder entitled **"Kodak Motion Picture Films and Equipment for Sports Analysis"** is available from Eastman Kodak Co., Rochester 4, New York. It describes the capabilities of 16mm cameras, lenses, film and projectors including the Kodascope Analyst II Projector, which was designed specifically for the needs of coaches and athletic directors.

2. **"A Chalkboard Manual"** has been prepared by Pennsylvania Slate Producers Guild, Inc., 205 Realty Building, Pen Argyl, Penna., to provide various aspects to consider when selecting a chalkboard to fill individual requirements. The Manual discusses selection, specifications, installation, uses and maintenance points to consider.

3. Bulletin describes a new **Safety Cross Mirror** that was developed to eliminate blind spots, prevent accidents, and increase vision for safer school and intracity bus operation. Safety Cross Mirror Co., Lambertville, Michigan.

4. Bulletin describes a new **Portable Flashing Signal** designed to slow down or stop traffic at school intersections, can be rolled easily to any desired location and put into operation with a turn of the key-lock switch. Sav-A-Life Signal Sales Co., 929—35th St., Des Moines, Iowa.

5. **Protect Public Property with Realock Fence.** Cities can provide permanent protection for school and municipal property by installing galvanized Realock fence. This sturdy fence is available in a wide variety of types—with or without barbed wire tops. It is fully described in literature from Realock Fence, the Colorado Fuel and Iron Corporation, Denver, Colorado.

**SAFETY EDUCATION** **NOVEMBER 1957**

425 N. Michigan Ave., Chicago 11, Ill.

Please send me more information on the items circled below:

1 2 3 4 5 6

Name .....

Title .....

Address .....

City .....

State .....

# Parents ~~WANT~~, *demand* a WELL EQUIPPED Safety Patrol . . .

## That's where we can help . . .

Graubard's Equipment is nationally known as the school safety patrol equipment "That Promotes Safety". It does this by fulfilling both of the conditions essential to a really effective Safety Patrol.

*First,* it gives each patrol member a definite sense of responsibility and a pride in doing his job well.

*Second,* being "Standard Equipment" it is recognized by school children and motorists alike, assuring their respect and cooperation.

Take the time to check your safety patrol today! Look over the many "standard" Safety Patrol Equipment items listed below and be sure your patrol members are properly uniformed and ready to perform the vital task of protecting your children, in all kinds of weather! . . .

***Samples Submitted Upon Request Without Obligation***

### SAFETY PATROL EQUIPMENT CHECK LIST

| | | |
|---|---|---|
| Belts | Raincoats | Corporal Digbys |
| Caps, Helmets | Capes | Trafficones |
| Badges | Caution Flags | School Warning Signs |
| Arm Brassards | Merit Awards | Traffic Control Signs |
| Emblems | Boots & Overshoes | Other Items |

WRITE FOR OUR LATEST CATALOG

**GRAUBARD'S** Note New Address **236 High Street** **Newark 2, N. J.**

*"America's Largest Safety Patrol Outfitters"*

*for colleges and universities . . .*

# a special, NEW Annual SAFETY SERVICE

## *to help you create an accident free campus*

With ever increasing enrollments, crowding of facilities and use of technical equipment, the hazards of fire, personal injury, and other accidents have become magnified on today's campus. In answer to requests from many colleges and universities for an aid to expanded, modern safety programming and education, the National Safety Council has created a new Annual Safety Service for Colleges and Universities . . . a hand-picked collection of safety training and program aids geared *especially* for their use.

The Service provides subscriptions to 5 different informative, idea-starting publications covering a range of activities . . . SAFETY EDUCATION and the HIGHER EDUCATION NEWSLETTER, NATIONAL SAFETY NEWS, FARM SAFETY REVIEW and HOME SAFETY REVIEW. It provides the most complete source of accident statistics available . . . the 96 page ACCIDENT FACTS. It gives you a view of what other leaders in safety education are doing, through the printed Transactions of the National Campus Safety Conference, and the School and College Sessions of the National Safety Congress. It provides posters, for each month of the year, service guides, National Safety Calendar, frequent technical releases, monographs and materials as published. And, subscribers to the Service may acquire other National Safety Council materials at prices regularly available only to members.

**A single subscription to the Annual Safety Service, and the wealth of materials it offers, costs only $19.80. Order from:**

**The School and College Division of the**

*National Safety Council*

*425 N. Michigan Ave.,*

*Chicago 11, Ill.*

411.03—117—